DOCUMENT RESUME

ED 095 732 HE 005 798

AUTHOR	Nolfi, George J.; Nelson, Valerie I.
TITLE	Strengthening the Alternative Postsecondary Education System: Continuing and Part-Time Study in Massachusetts. Volume 1--Summary Report and Recommendations; Volume 2--Technical Report.
INSTITUTION	University Consultants, Inc., Cambridge, Mass.
SPONS AGENCY	Massachusetts Advisory Council on Education, Boston.
PUB DATE	Sep 73
NOTE	1,061p.
EDRS PRICE	MF-$1.80 HC-$51.00 PLUS POSTAGE
DESCRIPTORS	*Continuous Learning; Economic Development; Educational Administration; Educational Finance; Educational Technology; *Higher Education; Interinstitutional Cooperation; Manpower Needs; Open Education; *Part Time Students; *Post Secondary Education; *Statewide Planning; Statistical Data
IDENTIFIERS	*Massachusetts

ABSTRACT

This document presents Parts 1 and 2 of a study of continuing and part-time study in Massachusetts. Part 1, summary report and recommendations, is a review of: criteria for shaping a new public policy for continuing education in Massachusetts, the phenomenon of continuing and part-time postsecondary education, the present system of part-time and continuing education, and recommendations. Recommendations cover strengthening the alternative system, interinstitutional cooperation and coordination, statewide planning coordination and program review, access, finance, institutions of the core and the periphery, organization and management in public and private institutions, organizing and using available educational technology, potential user demand estimation as a basis for planning continuing education, continuing education and the economy, and the role of the proposed Massachusetts open university as part of the alternative postsecondary education system. Part 2, the technical report, presents statistical data and other necessary materials to support the recommendations. (MJM)

ED 095732

STRENGTHENING THE ALTERNATIVE POSTSECONDARY EDUCATION SYSTEM: CONTINUING AND PART-TIME STUDY IN MASSACHUSETTS

(Volume I -- Summary Report and Recommendations)

GEORGE J. NOLFI, JR.
Study Director

VALERIE I. NELSON
Assistant Study Director

September 1973

U.S. DEPARTMENT OF HEALTH.
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

performed by:
University Consultants, Inc.
45 Hancock Street
Cambridge, Massachusetts 02139

performed for:
Massachusetts Advisory Council on Education
182 Tremont Street
Boston, Massachusetts 02111

HE005798

STUDY STAFF

DR. GEORGE J. NOLFI, JR. STUDY DIRECTOR
MS. VALERIE I. NELSON, ASSISTANT DIRECTOR

Contributing Research Staff:

Mr. William P. Moore
Mr. Michael Mears
Mr. Lawrence Tell
Dr. Stephen Fischer

Administrative Assistant:

Ms. Christelle K. Paynter

Research Assistants:

Mr. Michael Spence
Ms. Trudy Zimmerman
Mr. Peter Skerry
Ms. Judy Cusick

Prepared Topical Background Papers:

Mr. Robert Saltzberg
Ms. Mary Lonergan
Ms. Cornelia Pistone

Statistical and Data Processing:

Dr. Edward Knipe
Dr. Marcus Lieberman

Map Preparation:

Mr. Kenneth Zolon

Report Production:

Ms. Kathleen Minder
Ms. Karen Geyer

TABLE OF CONTENTS

VOLUME ONE: SUMMARY REPORT AND RECOMMENDATIONS*

Letter of Transmittal . . . i

Foreword . . . iii

Preface . . . v

I. INTRODUCTION: CRITERIA FOR SHAPING A NEW PUBLIC POLICY FOR CONTINUING EDUCATION IN MASSACHUSETTS

  Objectives and Priorities . . . 1
  Definitions . . . 2

II. LISTING OF MAJOR RECOMMENDATIONS. . . . 4

III. THE PHENOMENON OF CONTINUING AND PART-TIME POSTSECONDARY EDUCATION

  Continuing and Part-time Adult Education. What is it? . . . 8
  Demand. . . . 8
  The Institutional Response. . . . 8
  Adults in Part-time Educational Activities. . . . 8

IV. PROVIDERS: THE PRESENT SYSTEM OF PART-TIME AND CONTINUING EDUCATION IN MASSACHUSETTS

  A. Service Characteristics . . . 14

    1. Geographic Service Areas. . . . 14
      Geographic Distribution of Continuing and Part-time Education Programs in Core Institutions. . 15
      Geographic Distribution of Periphery Institutions . . . 17
      The Determination of Thirteen Geographic Service Areas . . . 17
      Analysis for Thirteen Service Areas . . . 21

    2. Branch Campuses and Satellite Teaching Centers. . . 22
      Strengths and Weaknesses of Satellite Teaching Centers . . . 22

    3. Enrollments and Enrollment Trends . . . 23
      Trends in Enrollments . . . 23

    4. Inventory of Continuing Education and Part-time Programs. . . . 27
      Continuing Education. . . . 27
      Part-time in Full-time Programs . . . 29
      Programs in Periphery Institutions. . . . 31

*Volume Two is bound in a separate volume.

5. Nontraditional Programs 34
Antecedents of the Nontraditional Study Movement. 34
The "New" Nontraditional Study Movement and Continuing Education. 35
"Open College" Pilot Program in Massachusetts . . 36

6. Employer-Based Programs 38

7. Educational Technology. 41

8. Transfer Policies 43

B. Structural Characteristics. 44

1. Administration and Management of Continuing and Part-time Postsecondary Education 45
Deans and Directors 45
The Continuing Education/Part-time Mix. 46
Status of the Faculty 47
Nontraditional Studies. 48
Common Administrative and Management Problems . . 48

2. Discussion of Financing, Pricing and Scholarship. . 50
The Problem of Obtaining Information on the Financial Structures of Continuing Education Programs. 50
Varied Financial Structures of Continuing Education Across the State 51
Implications of Self-Support and Subordinated Administration at the Institutional Level . . . 52
Institutional Costs of Continuing Education Programs. 54
Pricing and Scholarships. 57

3. Cooperation and Coordination in the System. 58

V. USERS: THE CURRENT STUDENTS CLIENTELE OF CONTINUING EDUCATION IN MASSACHUSETTS

A. Characteristics of Students in Continuing Education and Periphery Institutions. 60

Men in Continuing Education 61
Women in Continuing Education 61
Participation in Continuing Education 62
Motivations for Enrollment 62
Student Clienteles in Periphery Institutions. 64
Proprietary and Independent Institutions. 64
Adult Education Programs. 64
Home Study Schools. 64

B. Comparison of Continuing Education Students to Massachusetts Population. 65

C. Access, Guidance, and Outreach Programs and Policies. . . 67

  Admissions 67
  Guidance. 67
  Outreach. 68
  The Education Periphery 69

VI. RECOMMENDATIONS: GOALS FOR STATE POLICY AND MEANS FOR ACHIEVING THEM

A. Strengthening the Alternative System. 73

  Major Recommendation. 73
  Rationale and Sub-Recommendations 73

B. Planning by Geographic Service Areas: Interinstitutional Cooperation and Coordination. 78

  Major Recommendation. 78
  Rationale and Sub-Recommendations 78
    The Current Situation in Massachusetts. 79
    Recognized Need for Planning of Continuing Education by Geographic Areas in Other States and Legislative Action 81
    Geographic Area Planning in Massachusetts Higher Education Under Present Voluntary Arrangements. . . 82
    Proposed Service Area Planning Boards (SAPB's) for Adult, Continuing and Nontraditional Education. . . 83

C. Statewide Planning Coordination and Program Review. . . . 91

  Major Recommendation. 91
  Rationale and Sub-Recommendations 91

D. Access: Meeting Unmet Needs 94

  Major Recommendation. 94
  Rationale and Sub-Recommendations 94
    Unmet Demands 94
    Barriers to Access. 95
    Relationships with Employees. 97
    Special Clientele Groups. 97
      The Disadvantaged 98
      The Elderly 98
      Women 99
      Other Clientele 99

E. Finance: Subsidizing Students Instead of Institutions . . 101

  Major Recommendation. 101
  Rationale and Sub-Recommendations 102
    General Considerations. 102
    Alternative Mechanisms of Support to Continuing Education 105

Vouchers for Special Clientele Groups. 107
Funding the Service Area Planning Boards 113
Institutional Costs and Indirect Subsidies of Continuing Education in Public Institutions. . . . 113
Raising Public Tuitions in Continuing Education. . . 113
Benefits of Higher Tuitions and Total Cost Accounting 118
Finances at Private Institutions 119

F. Full Partnership: Institutions of the "Core" and the "Periphery". 120

Major Recommendation 120
Rationale and Sub-Recommendations. 120

G. Organization and Management in Public and Private Institutions 123

Major Recommendation 123
Rationale and Sub-Recommendations. 123

H. Organizing and Using Available Educational Technology. . 128

Major Recommendation 128
Rationale and Sub-Recommendations. 128
Public Television Access and Use 129
Commercial Television and Radio Resources and Accessibility. 131
Radio Resources and Accessibility. 131
Use of Existing Programs for Education 132
Geographic Service Areas 132
State and Regional Networks. 133
Cable Television 134
Video and Audio Tape Exchange. 134
Use of Technology to Serve Educational Needs of Employers. 136

I. Potential User Demand Estimation as a Basis for Planning Continuing Education. 137

Major Recommendation 137
Rationale and Sub-Recommendations. 137
Design of a Market Study (Review of Studies in Other States). 138
The Market for an External Degree in Massachusetts. 140

J. Continuing Education and the Economy 145

Major Recommendation 145
Rationale and Sub-Recommendations. 145
Education as a Form of Investment for the Individual 145
Educated Workers and the Job Market. 146
Planning for Continuing Education in Massachusetts . 147

K. The Role of the Proposed Massachusetts Open University (MOU) as Part of the Alternative Postsecondary Education System 150
- Major Recommendation 150
- Rationale and Sub-Recommendations. 150
  - Competency-based Degrees 151
  - Credit Transfer and Accumulation 152
  - Contracts for MOU Degrees and Course Credits with Non-Degree-Granting Education and Training Institutions and Organizations 152
  - Target Clientele for a Second Chance University. . . . 153
  - Preferences Among Adults in the General Population and Among Continuing Education Students for New Programs 154

VII. ADDENDA

- Footnotes. A-1
- Background of the Study. A-2
  - Purpose. A-2
  - Scope. A-2
    - Original Boundaries: Institutional Data from Degree-Granting Institutions. A-2
    - Expanded Boundaries: Student Questionnaire in Degree-Granting Institutions and Analysis of Peripheral Institutions A-3
  - The Generation of a Data Base: Sources, Approach and Methodology. A-4
  - Institutions Included in the Study A-5
- Advisory Committee for the Study A-6
- Massachusetts Advisory Council on Education. A-8
- Table of Contents of the Technical Report. A-10

UNIVERSITY CONSULTANTS, INC.
65 [illegible] St., Cambridge, Mass. [illegible] (617) [illegible]

LETTER OF TRANSMITTAL

Mrs. Mary Warner, Chairman
Massachusetts Advisory Council on Education
182 Tremont Street
Boston, Massachusetts 02111

Dear Mrs. Warner:

In 1971 Dr. William Gaige, then Research Director for the Advisory Council conducted a conference at Henderson House to discuss the problems of continuing and part-time higher education in Massachusetts. Educational leaders from public and private institutions who were present agreed that the subject warranted an Advisory Council study, but debated which of several troublesome issues should be the focus of such a study. In the several months that followed, the issues to be addressed became defined, and we were approached to carry out an appropriate study.

The study was to address selected aspects of continuing and part-time higher education and of interinstitutional cooperation and coordination in the Commonwealth covering both public and private institutions. Its purposes were two: First, because the information then available was totally inadequate for intelligent policy formulation, a data base was to be generated which would permit detailed and objective analysis of the current "system" of continuing and part-time education in Massachusetts. Second, the study should present to the citizenry and to education policymakers a set of recommendations for public and private institutional policies for the 1970's.

During the course of this Study we gathered extensive data from all public and private institutions across the State which have continuing or part-time education programs. We wish to thank the many individuals in these institutions for their labor and assistance in generating information at a level of accuracy, detail and specificity which has never before been compiled on this subject in this State. Particular thanks are due the three public segmental offices (University of Massachusetts, State College System, Board of Regional Community Colleges) and the Offices of the Association of Independent Colleges and Universities of Massachusetts. Thanks are also due the many proprietary institutions, school system adult education programs, vocational schools and home study schools which responded to our mail and telephone requests for information.

Further, extensive interviews and consultations were conducted. I wish personally to thank the many educational leaders throughout the State with whom I have spoken during the year. Presidents, deans, continuing education directors, faculty and students at every campus visited (which included most degree-granting institutions mentioned in the Study) were most willing to give their time and suggestions. Representatives of proprietary institutions, adult education centers and programs, businessmen and knowledgeable private citizens were similarly cooperative. The candid and astute comments made in these interviews are reflected in what we have said and suggested in the Volume I Summary Report. However, responsibility for the conclusions and recommendations rests with the authors.

We want to also express here our appreciation to Dr. Allan Hartman and Dr. Ronald Jackson of the Council staff who have been during this Study both concerned and sensitively informed critics and great friends. The same thanks are due Dr. William Gaige, formerly Council Research Director, who personally supervised this Study in its early stages. Council member Morton Godine has taken a special interest in the Study all along, and we wish to thank him for the Council perspective he reaffirmed.

Appreciation is also extended to Secretary of Educational Affairs Joseph Cronin and to Chancellor of Higher Education Patrick McCarthy for their support of the Study, and their advice.

We want to make a special point of thanking the members of the Study Advisory Committee who have given helpful counsel, both individually and collectively, throughout the Study and particularly in its final stages. From their familiar names and reputations any reader can imagine the lively and tough-minded manner in which they provided a sounding board for our ideas.

Given these efforts, which describe a Statewide exercise of considerable intensity and depth, we hope that the Study will be used as an instrument of action and not simply a document for reflection. This has been our intent in preparing it.

Hopefully, we have written the preface to a process that will continue beyond the completion of this report. In short, we would urge the Council to view the submission of the attached documents as not a final, but a first step in addressing these important issues in Massachusetts' educational policy. This Study, quite frankly, will not have served the people of the Commonwealth well unless its recommendations, or modifications thereof that emerge from policy debate, are implemented.

Sincerely,

George J. Nolfi, Jr.
President

FOREWORD

Here the Advisory Council presents a powerful report that challenges the Establishment to move and to commit. A system called continuing education is, for the first time, fully explored and its potential revealed. The Advisory Council on Education is charged by law to "analyze, plan and evaluate the programs and systems used by all agencies for public education in the Commonwealth ... and to recommend such policies as to promote and facilitate coordination, effectiveness, and efficiency...." Since its inception in 1966, it has conducted a number of comprehensive studies of programs and systems at all levels of education.

Recognizing that continuing and part-time study at the college level involved more than 110,000 students and had received limited public policy attention, while 215,000 full-time day students were the focus of the extensive planning efforts of several Statewide bodies and agencies, local consortia of institutions, etc., the Council determined that a study of continuing and part-time programs and needs would be in the public interest.

In mid-1972, the Council contracted with Dr. George Nolfi, President of University Consultants, Inc. to direct a study through his firm. The result of the efforts of Dr. Nolfi and his associates, particularly Ms. Nelson, is comprehensive -- certainly the most thorough effort by any state so far to describe and rationalize, from a consumer's point of view, the extensive continuing and part-time postsecondary educational activities under way and provide the guidelines for innovative yet pragmatic public policy. The Study's focus is Massachusetts, but its analytical perspective, its insights and its recommendations are applicable in any state.

Centering on the consumer has shaped both the scope of analysis and the thrust of the recommendations. The Study argues that continuing and part-time education, while having grown in a haphazard manner, now constitutes in some respects a base for an alternative postsecondary education system geared to the adult population's needs. The Study's recommendation that this alternative "system" should be strengthened by State policy to encourage its growth as an alternative more suited to adult needs than the traditional full-time day model, is at once a bold design for higher education reform and a pragmatic proposal for building on what we already have.

The Study had two basic tasks: The first was to generate a data base on continuing and part-time study which would provide educational policymakers with the first detailed information on this sector of postsecondary education ever gathered in the State. This task has been accomplished in the Technical Report (Volume II) with such depth and specificity, that public policy debate regarding this sector can be raised to totally new realms.

The second task of the Study was to render appraisals, judgments, and recommendations regarding public and institutional policies for continuing and part-time education in the 1970's. This territory has been charted in the Summary Report (Volume I) with a set of recommendations and supporting analysis which are a manifesto for bold and positive educational reform tempered by a reasoned and user-oriented public policy perspective.

The scope and boundaries of the Study were changed, as described in the Addenda, as the Study progressed upon recommendation of the Study Director. The comprehensive coverage of private insitutions, the exceptionally detailed student clientele analysis and comparison to Census data, the inclusion of proprietary institutions in the Study, and the investigation of employer-based postsecondary education are but four examples of this expanded scope which were endorsed by the Council because of their importance to current issues of educational policy.

As this Study progressed, some data and recommendations were made available to operating and planning agencies, and there is evidence that the Study has already made an impact. The report represents a comprehensive analysis of facts and data and a timely agenda for lively debate and dramatic action. Begin that debate, the Advisory Council urges, and let it sweep the way to implementation.

Ronald B. Jackson
Acting Director of Research
Advisory Council on Education

PREFACE

The completion of a major policy study is just the beginning of a process through which issues raised may be prudently addressed. All too often a study's final report is seen as a point of conclusion--a point of view which often makes such a study effort relatively useless.

It is our view that this Study has produced the facts and figures, detailed the qualitative aspects, and defined the policy parameters and options to permit for the first time logical and consumer-based policy implementation in the area of continuing and part-time education. The debate and decision and action must now ensue. It must involve the several State agencies concerned with educational policy, the public and private degree-granting institutions, the professionals and the lay boards, the proprietary institutions, vocational schools and school system adult education programs, the Legislature and various private groups and organizations.

We believe that our analysis has been thorough, our findings well grounded in demonstrable fact, and our recommendations soundly formulated in the public's best interest. We believe it essential that the Commonwealth use this report as a guide for effectively meeting the postsecondary educational needs and aspirations of its adult population.

The overall report is presented in two volumes. Volume I, the Summary Report and Recommendations, provides an analytical overview of the major findings, interpretation of their meaning, conclusions drawn from these findings, and recommendations about what needs to be done in the Commonwealth in continuing and part-time education if the public interest is to be served.

Volume II, the Technical Report, provides over 800 pages of detailed facts, figures, and descriptive prose. Our intent in this volume has been to present data, findings and conclusions. We have deliberately made Volume II a descriptive analysis (leaving our prescriptive interpretations to Volume I) so it could serve as a reference document, placing a floor of fact under whatever policy options are presented for debate. It provides the objective information against which policy options can be evaluated, rational planning decisions made, and logical actions implemented.

George J. Nolfi, Jr.
Study Director
President,
University Consultants, Inc.

I. INTRODUCTION: CRITERIA FOR SHAPING A NEW PUBLIC POLICY FOR CONTINUING EDUCATION IN MASSACHUSETTS

The strengths and weaknesses of the current system of continuing and part-time postsecondary education in Massachusetts are illustrated in Volume II, the Technical Report. Before considering specific recommendations, it is appropriate to outline some of the overall objectives and priorities which have governed the selection of the particular recommendations presented.

Objectives and Priorities

1. A first priority is to take the consumer's point of view. Recommendations for change must assure sensitivity of the present part-time and continuing education system to the needs of individuals and the public interest in the 1970's. Service to individuals and client groups and the institutional patterns and characteristics which will maximize that service must become more important considerations than traditional distinctions between types of institutions.

2. Creating a maximum diversity of options for adult part-time students is a priority objective. Adult postsecondary education needs should be served in a manner and by a system deemed most appropriate and not by a part-time replication in a subordinate status of the day postsecondary model.

3. Equal educational opportunity must be made a reality for adult students wanting postsecondary education. Special clienteles (such as low-income disadvantaged) should be given public subsidies in a form which gives them direct purchasing power at any institution of their choice.

4. State subsidies to continuing and part-time education should go directly to students, so that each individual will have maximum control over shaping his educational program and institutional selection. Other State subsidies should be provided to geographic service area planning boards for coordination and planning, but not to individual institutions.

5. New mechanisms are needed to provide counseling and guidance, access to information on educational opportunities and assessment of proficiency.

6. Continuing education, part-time and nontraditional study opportunities for adults must be provided with maximum economy and the best utilization of existing resources.

7. When considering part-time and continuing postsecondary education, the universe of degree-granting two- and four-year institutions is too narrow. Proprietary institutions, postsecondary activities of regional vocational-technical schools, adult education provided by school systems and by private centers, home study correspondence schools, and the education output of employer-based education programs must be included as "legitimate" learning sites.

8. Cooperative efforts involving resource utilization of one or more institutions or various types of institutions should take precedence over separate responses by individual institutions to identified needs.

9. Competition between educational institutions is desirable provided that competition is along dimensions that enhance the service of the public interest.

10. The utilization of existing public and private resources in both the degree-granting institutions and the "peripheral" postsecondary institutions should be maximized with minimum new capital expenditures.

Definitions

Continuing Education includes courses, programs and students within the given institution which fall under the jurisdiction of the Division of Continuing Education or Extension or equivalent. In the public sector this means all courses, programs, and students not funded through the regular maintenance budget. In the private sector this usually means an evening division or college.

Part-time in Regular Full-time Programs is defined as all part-time study options, students, and programs, etc. which are not under continuing education as defined above and which are funded through the regular institutional budget. In the public sector this means all programs, etc. funded through the regular maintenance budget. Part-time is further defined as follows: (a) Eight (8) or less credit hours for undergraduates in a 15-hour program; (b) Four (4) or less credit hours for graduates; (c) One or two courses in a four or five course program; (d) Summer session students who were not enrolled as full-time students during the preceding academic year. The reason for selecting this specific definition of part-time has to do with the overall objectives of this study. The "clientele" on which this study is focused is those students who do not themselves view study as their major occupation. The following groups should therefore be included:

a) people with full or part-time jobs who take courses on the side;

b) women who are primarily housewives who take courses on the side.

Groups not included are:

a) people who work part-time in addition to classwork which is their main goal, such as those students who must work;

b) people who might be taking a light load this particular semester but consider themselves primarily as students.

The Education Core describes the postsecondary degree-granting two- and four-year institutions in the public system (Community Colleges, State Colleges, University of Massachusetts, Lowell Technological Institute, Southeastern Massachusetts University) and the larger private institutions, generally those members of the Association of Independent Colleges and Universities of Massachusetts as well as selected others having significant continuing education programs.

The Education Periphery are those institutions other than core institutions as defined above, engaged in some form of adult postsecondary education and having education as their primary function: other degree-granting or nondegree-granting proprietary or independent institutions, adult education programs in the public school system, regional vocational-technical institutes, private adult evening centers, and home study or correspondence schools. Other forms of adult education such as church classes or YMCA classes were not included, since education was not their primary function.

II. OVERVIEW OF RECOMMENDATIONS

A. Strengthening the Alternative Postsecondary Education System

The Commonwealth should recognize that: it has a valuable educational resource in the existing system of continuing and part-time postsecondary education; that this particular system's characteristics as an educational model are significantly different from the traditional full-time day higher education system and more suited to the varied needs of an adult clientele; and that therefore the autonomy and independence of continuing and part-time education should be strengthened, according it equal status to full-time higher education, so that it may maintain its nontraditional operational characteristics and truly become an alternative postsecondary education system for adults.

B. Planning by Geographic Service Areas: Interinstitutional Cooperation and Coordination

Given the geographically-determined character of continuing education attendance, voluntary Service Area Planning Boards (SAPB's) should be established in each of the thirteen geographic service areas this Study has identified. These Boards should be comprised of the president (or his appointed representative) of each and every core and periphery institution within each service area. These SAPB's will provide a mechanism for coordinated area-based planning for part-time and continuing postsecondary education in Massachusetts.

The SAPB's should not have formal program-approval authority (which authority properly rests with the Board of Higher Education) but they should provide a voluntary planning and negotiation forum and be advisory to the BHE. The SAPB's are not to be an arm of the BHE, but rather a forum in which essentially local problems can be worked out by reasonable discussion among the institutions involved.

Each SAPB should create a series of working committees to carry out functions of: coordination through discussion; program planning, review and articulation; needs analysis; publicity; operating Area Educational Opportunity Centers; operating Learning Centers of the proposed Massachusetts Open University; review of branch campus and satellite teaching centers; advising Statewide agencies; assisting in the administration of the proposed Adult Continuing Education Voucher (ACEV) program; facilitating joint, cooperative undertakings between institutions in such fields as use of educational technology.

C. Statewide Planning, Coordination and Program Review

There should be in the Board of Higher (or Postsecondary) Education a specific designation of a Deputy or Vice-Chancellor in charge of continuing and part-time postsecondary education. Legal program and branch campus review authority should remain with the State Board, which should: coordinate the efforts of the proposed Service Area Planning Boards (SAPB's) and administer the SAPB matching grant funding program; be the site of resolution of disputes not resolved at the SAPB level by exerting its legal mandate to review new, overlapping or duplicative programs, branch campuses and satellite teaching centers as needed; administer the proposed Postsecondary

Adult Continuing Education Vouchers for Special Clienteles program (ACEV's); work through the SAPB's to implement on a regular basis the Statewide information system instituted in the process of this Study; establish a Certificate of Need approach to reviewing new programs in continuing and part-time education.

The Legislature should clearly and specifically reaffirm the responsibility of the BHE (BPE) to review and approve programs in continuing and part-time education and appropriate additional funds for that function.

The public systems (Community Colleges and State Colleges) and the Association of Independent Colleges and Universities of Massachusetts should have a senior staff person in their central offices and a permanent committee of presidents assigned specific responsibility for continuing and part-time education and nontraditional study.

D. Access: Meeting Unmet Needs

Access to the system of continuing and part-time postsecondary education in Massachusetts should be assured for all elements of the adult population through a variety of measures.

Access among many underserved clienteles is decisively a function of outreach (the extent to which schools actively seek out students). Outreach efforts should be focused on (a) the student's perceptions of his ability to perform, (b) his perceptions of the value of the education undertaking he may contemplate and (c) his concern about financial resources.

Area Educational Opportunity Centers (AEOC's) (located so as to be easily accessible to disadvantaged population groups) should be established in each service area under the auspices of the SAPB's to perform outreach, counseling and guidance functions and to establish lines of communication with non-school agencies.

The Commonwealth should establish an Adult Continuing Education Voucher (ACEV) program of State aid specifically to adults of low income and low previous education.

There should be increased use of educational technology, programs and courses offered in a variety of times and formats, better transportation services, publicity, credit card tuition payment arrangements, and continuous analyses to determine more precisely the interests and needs of particular cliente group and coordinated area planning of appropriate programs.

Efforts should be made to remove other barriers women face through adult day programs for women with children in school, day care facilities on campus for women with small children, and the use of broadcast technology to carry educational services into the home.

E. Finance: Subsidizing Students Instead of Institutions

The mechanism of support for adult continuing postsecondary education should be based on its effect on the operation of the system (i.e. one which will facilitate development of desired patterns of institutional and clientele response).

The Commonwealth should adopt financial policies and mechanisms responsive to the needs of special student clienteles and supportive of strong and independent continuing education programs. Those most in need of financial assistance should receive it in a manner which has the precision to effectively discriminate in their favor. Flat-rate low tuition lacks that precision since it effectively provides a scholarship or public subsidy to all students regardless of need. Clientele-specific cash vouchers are therefore the policy instrument of choice for targeting aid.

All State support (with the exception of the Service Area Planning Board Grants discussed below) for continuing and part-time postsecondary education should be provided to needy adult students in the form of vouchers and not to institutions.

The Commonwealth should, therefore, establish a Massachusetts Adult Continuing Education Vouchers program for low-income, low previous education adults to be operated through the Board of Higher (Postsecondary) Education. Recipients could take one or two continuing education courses per semester up to a specified limit. The vouchers should vary in amount from full to partial tuition as a function of increase in both the recipient's income and previous education. The vouchers should be tenderable at any postsecondary institution, provided the institution is a participating member of a S[illegible]ice Area Planning Board.

The level of funding of the ACEV's should be $2 million in FY 1975 and $4 million in FY 1976. The voucher should be $40 per credit hour or actual tuition, whichever is lower for the lowest income and previous education groups and become progressively lower for higher income and education levels within the eligible range.

A tax credit policy should be implemented such that employers receive a tax credit for one-half of the funds they expend for tuition or contract educational services at any postsecondary institution participating in a Service Area Planning Board.

The current program of allowing veterans and certain teachers to attend classes tuition-free should be terminated on their present basis and be subsequently conducted as true voucher programs with a State cash appropriation and tenderable at either public, private or proprietary institutions.

The Commonwealth should initiate an SAPB Incentive Matching Grant Program to fund the establishment and operation of the proposed Service Area Planning Boards. The formula should be 75% State matching to 25% contributions from member institutions with an initial FY 1974 State appropriation of $300,000.

The self-supporting character of continuing education in the public institutions should be maintained, strengthened, and made more explicit so as to reduce the degree of arbitrary control over the use of continuing education revenue sometimes exercised by the day full-time college. An explicit overhead charge payable to the General Fund (or to a special trust fund to finance other Statewide continuing education expenditures) should be made.

Sole responsibility for fiscal management of the continuing education budget should rest with the Dean of Continuing Education on each campus, responsible in such financial matters directly to the President.

Changes in public policy should encourage operation on the basis of (a) a set of explicit cost accounting rules, (b) explicit payment for what are now indirectly subsidized overhead costs, (c) explicit new appropriations of institutional contingency funds for presidents to use in managing the overall institution (both full-time and adult-continuing divisions), (d) new explicit State subsidies to adult students in need in the form of vouchers, and (e) additional expenditures out of continuing education receipts for ancillary services for adult students in each continuing education program and for increased faculty salaries.

In order to raise the revenues to cover indirect overhead costs and for other complementary services and program activities on each campus, the tuition rate in public institutions should be raised to approximately $40 per credit hour.

Private institutions should adopt the total cost accounting approach suggested and should examine individually the possibility of lowering somewhat the tuition rates they are now charging in part-time and continuing education while maintaining fiscal solvency.

F. Full Partnership: Institutions of the "Core" and the "Periphery"

To best meet adult continuing education needs a new partnership must be formed among all the postsecondary education providers in a given geographic area including public and private degree-granting institutions, proprietary institutions, public regional vocational-technical schools, private adult education centers, school system adult education programs and certain employer-based education programs. This partnership should be formed through the proposed Service Area Planning Boards (SAPB's) on which all the providers of continuing postsecondary education within an area would be represented. Coordinated planning should be undertaken to maximize service and program articulation and minimize duplication. All providers who are SAPB members should be eligible for the proposed Adult Continuing Education Vouchers (ACEV's). Continuing postsecondary education should be viewed in terms of its educational output regardless of the type of institution or structure involved.

G. Organization and Management in Public and Private Institutions

The senior position with respect to part-time and continuing and nontraditional study on each public or private college or university campus should hold the title of Dean of Adult Continuing and Nontraditional Study, with rank, responsibilities, and prerogatives comparable to those of an academic dean or vice president. The Dean should administer an independent division co-equal with the full-time-day division. The Division of Adult Continuing and Nontraditional Study should offer its own degree (e.g., a Bachelor of General Studies) for which the Division has sole discretion over academic requirements. The Division should also offer other traditional degrees of the day division, but for those a joint curriculum committee should govern academic requirements. As elaborated below, the financial structure and mode of operation of the Division of Adult Continuing and Nontraditional Study should be quite different from traditional full-time higher education because the clientele it serves and the educational model it represents are quite different.

H. Organizing and Using Available Educational Technology

Public and private investment in educational technology in the Commonwealth is being underutilized (both broadcast and studio production facilities). Software and mechanisms for utilizing existing capital facilities are needed. Technology should not be viewed as an opportunity to save money, for there is little evidence that it will, but as a way institutions can cooperate to increase access to adult continuing postsecondary education. The Commonwealth should pursue the following opportunities for utilizing existing facilities: geographic service area, regional and Statewide planning and sharing in the use of facilities and the development of software; State and regional instructional TV networks using existing underutilized facilities; a Statewide video- and audiotape resource center; educational radio, specifically using FM side channel broadcast; providing current school broadcast over public television more effectively through videotape distribution, with the broadcast time so released used for post secondary continuing education programming; use of commercial TV and radio for continuing education programming in keeping with the increased public service obligations of these stations; and use of TV and radio technology for the delivery of direct instructional services to employers by educational institutions.

I. Potential User Demand as a Basis for Planning Continuing Education

Because of the complex multivariate character of the demand for adult continuing postsecondary education, continuous systematic needs analysis should be performed by the proposed Service Area Planning Boards (SAPB's), the Board of Higher Education and the proposed Massachusetts Open University. Planning of programs, branch campuses, use of technology, outreach efforts, etc. should be much more carefully linked to needs analysis than has typically been the case for full-time higher education. Accurate and up-to-date estimation of demand is the key to rational response to changing educational needs and wishes of adults and their employers.

J. Continuing Education and the Economy

A continuous coordination of employers and continuing education directors in each geographic service area through the auspices of the area SAPB is recommended to provide for a flexible and responsive system of meeting local needs. The goal of coordination should be to leave educational decisions to students, but to counsel and guide them in choosing areas of greatest job possibilities. Students would become aware of fields of job shortage or surplus and employers would avoid costs of unfilled jobs.

In considering the coordination of continuing education and the economy: continuing education should be publicly encouraged; communication between employers in each area and continuing education directors should be maximized; continuing education programs should be flexible and responsive to changing curricular needs; guidance and counseling efforts to reach students should be expanded; outreach programs to disadvantaged groups should be closely coordinated with business and industry; and coordination among all providers of continuing education should be made.

K. The Role of the Proposed Massachusetts Open University (MOU) as Part of the Alternative Postsecondary Education System

The proposed Massachusetts Open University should be carefully designed to perform several functions not now well-performed by existing continuing and part-time education so that the roles of the proposed open university and the existing continuing education activities will be complementary and not duplicative.

The MOU should be the State Examining University and offer MOU external degrees at the Associate and Bachelor's levels based on certification of competency through proficiency examinations. The fastest and lowest cost means of implementing such degrees is through purchase and borrowing of examination materials from other states which have functioning external degree programs.

The MOU should establish contracts with non-degree-granting proprietary institutions, home-study schools, employer-based education programs, public vocational schools, private adult education centers and other organizations which provide postsecondary instruction but do not grant degrees, so that students in those settings can accumulate MOU credits for appropriate study toward MOU degrees if they wish.

The MOU should establish a computerized credit bank in which both regular course credits from any institution and "continuing education units" (for noncredit work) could be stored and accumulated by adults who study over a period of time at several different institutions.

The MOU should also offer Associate and Bachelor's degrees in liberal studies, based on a structured liberal studies curriculum (again using materials from other states) and relying heavily on credits accumulated at other institutions and on home independent study, and in general studies in order to provide a flexible degree option for granting of degrees through an MOU credit bank.

The MOU should devote a portion of its efforts (jointly with the Bureau of Adult Services of the Department of Education) to providing a "second chance" educational opportunity to adults with a high school diploma or less. Such adults have a considerable interest in opportunities for furthering their education, and they are not now being well-served by the continuing education system.

III. THE PHENOMENON OF CONTINUING AND PART-TIME POSTSECONDARY EDUCATION

Continuing and Part-time Adult Education: What is it?

Continuing and part-time education encompasses a broad range of activities and a variety of interests and needs. On the one hand is an adult population, employers and government agencies, with diverse vocational and avocational needs for formal education services; on the other hand, a complex system of degree-granting colleges and universities, proprietary institutions, public school programs, employee training programs and agency programs providing these formal education services.

The extensiveness of this system in Massachusetts is not generally recognized: 90,000 students are enrolled in continuing education programs and 20,000 part-time in full-time programs in degree-granting colleges and universities. It is estimated that a minimum of 30,000 are enrolled in proprietary schools and for-profit correspondence schools, 150,000 in public school adult education programs, and over 150,000 in public agency programs.[1] (Employer training programs are not estimated.) This study is focused on the postsecondary students and programs in each of the above institutions. Because of the diversity of institutional providers and the semi-independent relationship of the part-time programs to the parent institutions, the system has potential for a great deal of flexibility and responsiveness to adult interests.

Demand

The demand for adult and continuing education has at least three sources: personal, employer, and government or societal. Demand from individuals has several motivations: 1) as a personal consumption good -- that is for the satisfaction of learning and socializing; and 2) as an investment good for job advancement with a degree or specific vocational training. Employers are interested in vocational training courses for employees. Governments are interested in manpower training to ease labor shortages, contribute to productivity, aid the disadvantaged, and, in general, to elevate the citizenry.

Over the last ten years demand for adult and continuing education has grown at a much faster rate than population. In 1957, one in thirteen adults was involved in some form of adult education classes; in 1973, one in eight.[2] Increase in demand probably is a function of a number of societal trends: more leisure time, greater affluence, higher minority aspirations, women's liberation, changing job requirements, and student disaffection with the traditional full-time, day, 9-month model of higher education. The demand for vocational certification has grown as our labor force has become more credentialled and our economy technically complex and service oriented. Much of the increase in demand over the past several years has also been for noncredit, avocational courses. Avocational courses are now a recreational activity, likened by one student to playing golf.

The Institutional Response

The response of suppliers to these increasing demands has been varied. Currently, the degree-granting colleges and universities are meeting only about 25% of adult and continuing education enrollments.[3] Traditionally, many private colleges and state university systems have provided adult extension programs of classes and correspondence in academic and vocational fields at the bachelor's and master's degree levels. More recently, public community colleges have taken an aggressive posture to serve community needs and claim to offer whatever people want--be it yoga or breadmaking. Thus community colleges have become involved in vocational training at the associate level and in noncredit courses of popular interest. Generally part-time and continuing education programs have had open admissions and are administratively and financially separated from full-time programs.

Beyond evening or extension offerings, however, institutions are now experimenting with "nontraditional" programs to reach groups previously excluded from colleges by virtue of age or socioecomomic position. In part this interest in new sources of students may be explained by faltering enrollments in the full-time, 18-21 year old category of students. The degree-granting institutions cannot respond easily to market conditions by cutting back on services because their faculty are to a large extent tenured and cannot be fired, and their physical plant is extensive. New clientele groups of students have, therefore, become an increasing necessity. Another impetus for nontraditional programs comes from the social pressure for equalizing opportunity and giving adults a second chance at a career.

Colleges and universities are, however, limited in responding quickly or sufficiently to changing demands; and this is particularly true for part-time or continuing education needs. Most of these institutions still regard as their primary student clientele the full-time undergraduates and graduate students, not the part-time students. Even more significant, however, is the complex of other purposes and goals of these institutions which may be in conflict with the objectives of serving students, full or part-time, and the complex of sources of funds and subsidies which mute the forces of competition in the market.

This intricacy of goals and sources of financial support insulates higher education from direct involvement with students in a market; that is, from fierce competition for students. When there are forces for change created by students, how does the institution in its current form respond? Although there are incentives for administrators to reform, either pressures from students or increasing financial constraints, they have little power over faculty organization and teaching. The faculty feels but indirectly the pressures of students and costs and may find other goals such as professional status more important than student satisfaction. It is not clear that the interests of the students as consumers are shared by these professionals who shape higher education.

How does this general description of higher education relate to part-time and continuing education programs? In some instances, these programs are administratively captured by this higher education system; in other cases, they are free of the larger goals and structures of institutions. Part-time students in full-time programs are closely tied to the existing structure of programs since they participate in the broad range of full-time offerings. Even graduate programs which are largely for part-time students, such as education and business, are organized as full-time programs. In particular, accrediting agencies require that a high percentage of their faculty be full-time. These graduate programs thus tend to be the most conservative among the part-time programs in meeting changing student needs.

Certain continuing education programs, however, thrive in a situation of great flexibility and independence from the main body of their parent institution. Continuing education divisions particularly in the community colleges may have discretion without regard to restrictive accrediting standards to offer courses in which students express an interest. The continuing education director, more than any other individual in higher education, may be regarded as an educational entrepreneur. Under conditions of receiving an indirect institutional subsidy in the form of office and classroom space, and often a requirement that a certain percentage of receipts be turned back to the institution's full-time program, the continuing education director may as he wishes juggle courses and students to balance the books. He may hire part-time faculty from inside the institution or adjunct faculty from other professions at fees lower than in the full-time day program. He can hire or fire this faculty on short notice, as demand rises or falls in total or in specific areas. He may advertise a wide variety of noncredit courses to test student demand, and then offer only those which will pay for themselves with high enough enrollments.

Many continuing education directors have this autonomy and discretion to expand programs to meet demand and have the flexibility to test the market for areas of high interest. The supply response of continuing education to consumers' preferences is in the aggregate, however, by no means perfect. Institutions do not necessarily open or move in response to changing needs. Whether a population is adequately served may depend on whether private institutions are close and have appropriate programs, or whether the public systems will open new campuses in the area.

Part-time students in Massachusetts degree-granting institutions are primarily in separate continuing or evening divisions (over 90,000) rather than part-time in regular day programs (over 19,000). Forty-three private junior colleges and colleges have programs; 13 community colleges, 11 State colleges, the University of Massachusetts, Lowell Technological Institute, and Southeastern Massachusetts University. Although private schools like Northeastern, Western New England College, American International College, Harvard, Boston College, and Boston University have long had large special programs for part-time adult students, most recent growth in enrollment has occurred in the public sector. Public programs currently enroll 55% of total continuing and part-time students; privates, 45%.

Proprietary institutions, in contrast to colleges and universities, do respond more to market conditions of demand as business firms in a typical market. Their survival depends solely on the favorable response of students to their programs, and they are more conscious of having to "sell" their product on the market. Because these institutions have no tenured faculty, they are able to expand and contract with rising and falling market demand. Being small, the cost of entering the market is low and new proprietary institutions enter the market easily. No other goals of research or public service and no other sources of financial support complicate their activities.

In Massachusetts about 250-300 proprietary and independent institutions are in operation each year. New schools are formed in response to rising student-market trends such as in data processing, and schools will close when demand falls. A conservative estimate is that about 9% of the schools in operation are new each year. Proprietary institutions are often the first to offer new courses in new fields of interest. Two or three years later degree-granting institutions may follow suit. [4]

Correspondence or home study schools offer courses in specialized occupational fields for those who prefer to study at home or cannot leave the home. They do not have the authority to grant degrees. In Massachusetts a combination of nationally-run correspondence schools and local programs operate. Sixteen schools are State-licensed with enrollments over 6,000 a year. Added to this population are enrollments in nationally-operated correspondence schools.

In the occupational sphere there are a wide variety of other educational activities carried on outside of educational institutions. Business and industry training provides a significant percentage of adult learning, but most of it is informal, on-the-job training. Formal training is largely at the professional or management level. Courses may be held in-house or contracted out, or subsidies may be given to employees to take courses in educational institutions.

Governmental agencies in the last few years have also developed a variety of programs of manpower training. In contrast to business and industry training, these programs are in large part for technical and trade skills aimed at upgrading skills of the disadvantaged populations. [5]

A variety of institutions offer noncredit courses to adults. The adult education programs of the public schools are primary in this area. Originally designed for basic education and education of immigrants with low education, these programs have since come to serve the leisure-time interests of adults in addition to adults needing high school credit courses. These programs may receive financial support from both the local community and the State. Administrative costs are low since courses are noncredit, and there is no need for record-keeping, and thus fees charged are low--from $5 a course.

In Massachusetts, historically, adult education programs have been required in towns over 50,000. School boards are notably independent-minded in Massachusetts, and there is little cooperation with the State

Department of Education, although there is State support for certain practical arts courses. The school systems are not entirely free to offer what they might wish, however, since fees are limited by the State to a low figure which might not support certain courses.[6]

Many of those programs maintain their traditional character of offering high school credit courses and practical arts or homemaking courses; however, the system is generally flexible enough to be changed. Directors of such programs may, if they wish, assume an agressive stance in expanding their programs into new areas. They may offer new courses if they can attract enough students with effective publicity. Once people in the community begin to hear about such programs from their friends, enrollments may expand substantially. Worcester and Springfield have extensive programs in noncredit areas. They also have training programs in cooperation with local industry.

Boston and Cambridge have unique forms of adult education--private, non-profit adult education centers. Enrolling thousands of students each term, they offer a wide variety of "esoteric" courses from yoga to auto mechanics to fine arts and music and to psychology and political science. Fees range from $5 to $100. Other civic and religious organizations such as YMCA's and YWCA's, churches, and youth centers also offer low cost courses for adults.

Adults in Part-time Educational Activities

Who is the typical adult student in each type of educational activity or institution and how well are the needs of the population being met? In general, those engaged in adult and continuing education activities are younger, better-educated, and at higher income levels than average. In national surveys, needs and interests may be expressed by less-educated, lower income groups; but a variety of personal and institutional factors appear to inhibit their participation.

In general, part-time and continuing education students in colleges and universities are an elite group in adult education. In 1969, about 25% of all adults in formal education activities were enrolled in part-time college programs. Compared to the typical adult student, they are younger, more job motivated, and of higher educational background and occupational status.[7]

Students in job training from business and industry or government programs and students in correspondence schools are of lower educational and occupational status. They are more likely to be male than female. Adult education participants in noncredit activities of public or private schools are less job-motivated, older, and also high income. They are more likely to be female than male.

The adults who express an interest in learning activities but do not participate are generally those of the lower and lower-middle class ends of the education, income, and occupational status scales. Their interests are largely vocational rather than leisure-oriented, and they perceive cost and time barriers to attendance. The greatest gap in interest and participation exists with respect to the vocational interests of women.8

To some extent interests expressed by various types of people explain their current participation rates in adult education as a whole and within specific education activities. Younger people are more interested in learning, and they also participate to a greater extent. Older students are expected and found more in public and private schools, community classes and private instruction than they are in college part-time courses. However, other participation rates are not explained by variations in interests expressed. Women express equal interest to men in credit, and yet they are currently receiving fewer credits. Their interests in vocational subjects are particularly unfulfilled.

In addition, the allocation of better-educated, higher occupational status persons to college part-time, and less educated, lower occupational status persons to job training and correspondence courses is clear, but not necessarily logical. Less-educated and low occupational status groups are interested in credit and in vocational subjects in particular, and there is no a priori reason why their interest cannot be met within the college part-time setting.

IV. PROVIDERS: THE PRESENT SYSTEM OF CONTINUING AND PART-TIME EDUCATION IN MASSACHUSETTS

IV.A. Service Characteristics

IV.A.1. Geographic Service Areas

Much of the analysis of this Study was based on the existence of geographic service areas in continuing and part-time education. Institutions and students were divided into thirteen discrete and differentiable areas across the State as created by centers of population, roads, location of campuses, etc. Programs, trends in enrollments, clientele served and other issues were examined for each of these discrete areas rather than aggregated across the State as a whole. The determination of these thirteen areas is described and illustrated below.

Analysis within discrete geographic service areas is appropriate both from the client's point of view and from a program and planning perspective. The necessity of analyzing issues for each service area rather than for the State as a whole stems from the nature of part-time study and the diversity of services offered across the State.

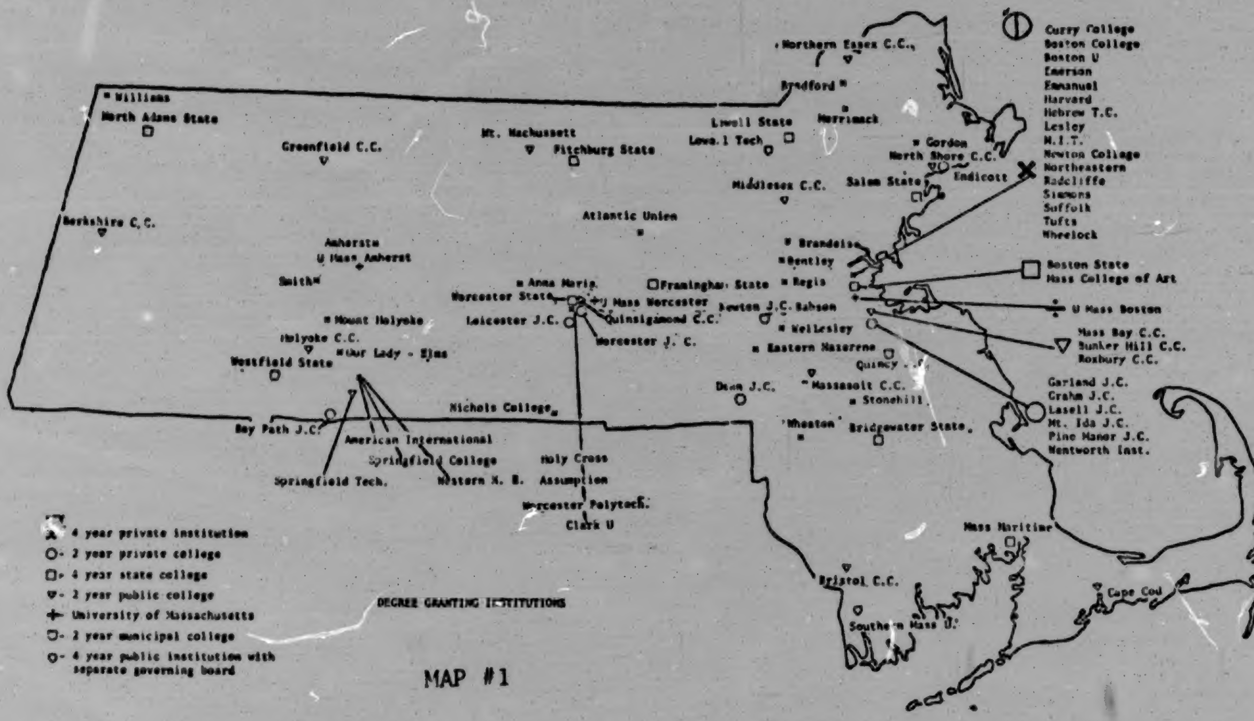
A major objective of this study is to examine services from the student-client's point of view. If the scope and distribution of services are to be examined in this manner, programs must be analyzed as they reach specific areas of population across the State. Geographic proximity strongly determines rates of attendance in programs. When adults across the country were questioned about barriers they perceived to taking continuing education or other adult education, about 46% responded that finding the time amidst other responsibilities to commute to and attend classes was a major problem.[9]

Strengths and weaknesses of program scope, comprehensiveness, competition and duplication are area specific and vary across the State. It is not a question of competition and coordination if a school in another geographic service area is offering the same degree or type of program, because the student clientele sources do not overlap. For example, it would be a mistake to link analysis of the Boston area with its multiplicity of programs with analysis of other areas of the State having only a few and limited programs. If analysis were made across the State as a whole, the Boston area with 50% of total enrollments would dominate the picture. Analysis by type of institution (e.g., State Colleges or Community Colleges) would also be inappropriate from the student-client point of view, since the specific subject of interest and the proximity of where it is offered are more important to a client than the type of institution supplying it.

Geographic Distribution of Continuing and Part-time Education Programs in Core Institutions

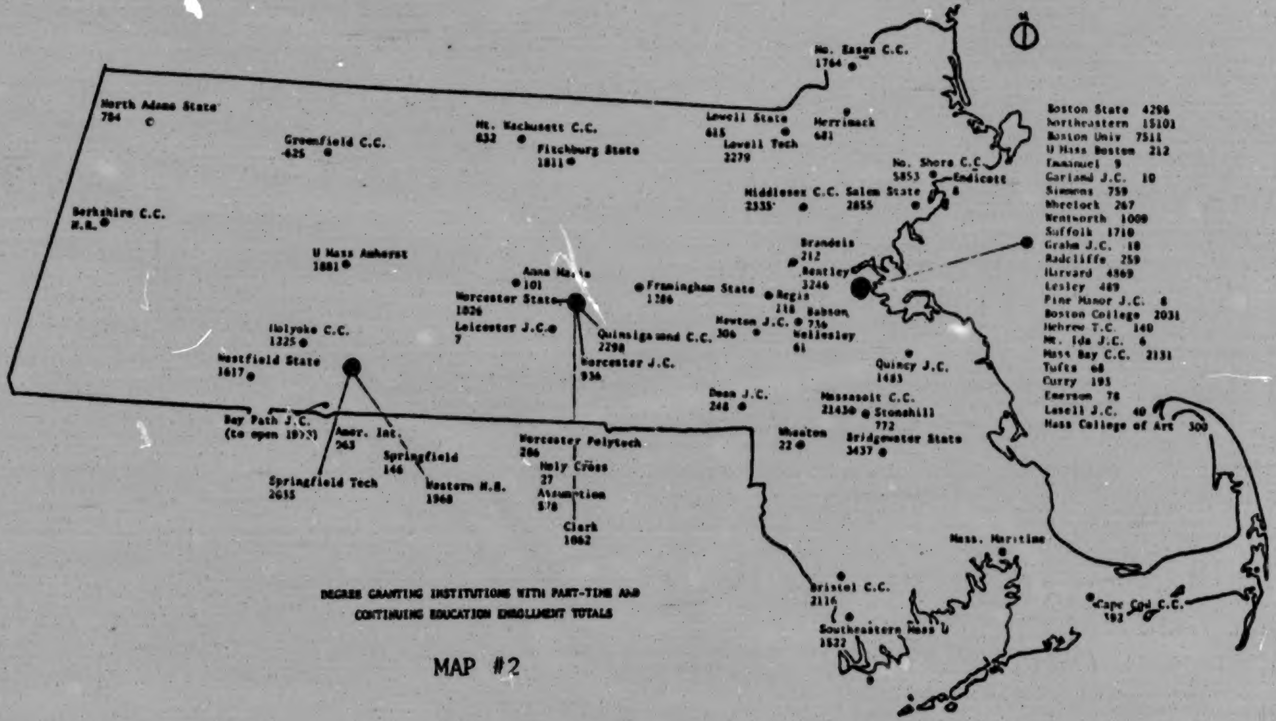
The distribution of continuing and part-time programs at degree-granting postsecondary institutions is shown in the following maps. The first map shows the degree-granting institutions in Massachusetts; the second map shows which have either continuing or part-time programs and the number of students enrolled in fall 1972. On the third map the centers of population and location of highways are delineated.

In comparing maps 1 and 2, two points become clear: first, the continuing and part-time programs are more heavily concentrated in the Boston area than are the institutions as a whole. Second, the public institutions provide most of the services, except in the metropolitan and suburban areas of Boston, Springfield and Worcester. Many private institutions in rural areas or small towns apparently do not perceive a strong role for themselves in continuing and part-time education. In these areas the development of programs has been from the opening campuses. In the large metropolitan areas, however, the private institutions have a strong tradition in serving adult needs for continuing education. It is in these metropolitan and suburban service areas that public/private competition is focussed.


Williams
North Adams State
Greenfield C.C.
Mt. Wachusett
Fitchburg State
Berkshire C.C.
Amherst
U Mass Amherst
Smith
Mount Holyoke
Holyoke C.C.
Our Lady - Elms
Westfield State
Bay Path J.C.
American International
Springfield College
Springfield Tech.
Western N. E.
Nichols College
Anna Maria
Worcester State
U Mass Worcester
Leicester J.C.
Quinsigamond C.C.
Worcester J. C.
Holy Cross
Assumption
Worcester Polytech.
Clark U
Atlantic Union
Northern Essex C.C.
Bradford
Merrimack
Lowell State
Lowell Tech
Gordon
North Shore C.C.
Endicott
Salem State
Middlesex C.C.
Brandeis
Bentley
Regis
Framingham State
Newton J.C.
Babson
Wellesley
Eastern Nazarene
Quincy
Dean J.C.
Massasoit C.C.
Stonehill
Wheaton
Bridgewater State
Mass Maritime
Bristol C.C.
Southern Mass U.
Cape Cod
Curry College
Boston College
Boston U
Emerson
Emmanuel
Harvard
Hebrew T.C.
Lesley
M.I.T.
Newton College
Northeastern
Radcliffe
Simmons
Suffolk
Tufts
Wheelock
Boston State
Mass College of Art
U Mass Boston
Mass Bay C.C.
Bunker Hill C.C.
Roxbury C.C.
Garland J.C.
Grahm J.C.
Lasell J.C.
Mt. Ida J.C.
Pine Manor J.C.
Wentworth Inst.
4 year private institution
O- 2 year private college
□- 4 year state college
▽- 2 year public college
+ University of Massachusetts
2 year municipal college
4 year public institution with separate governing board

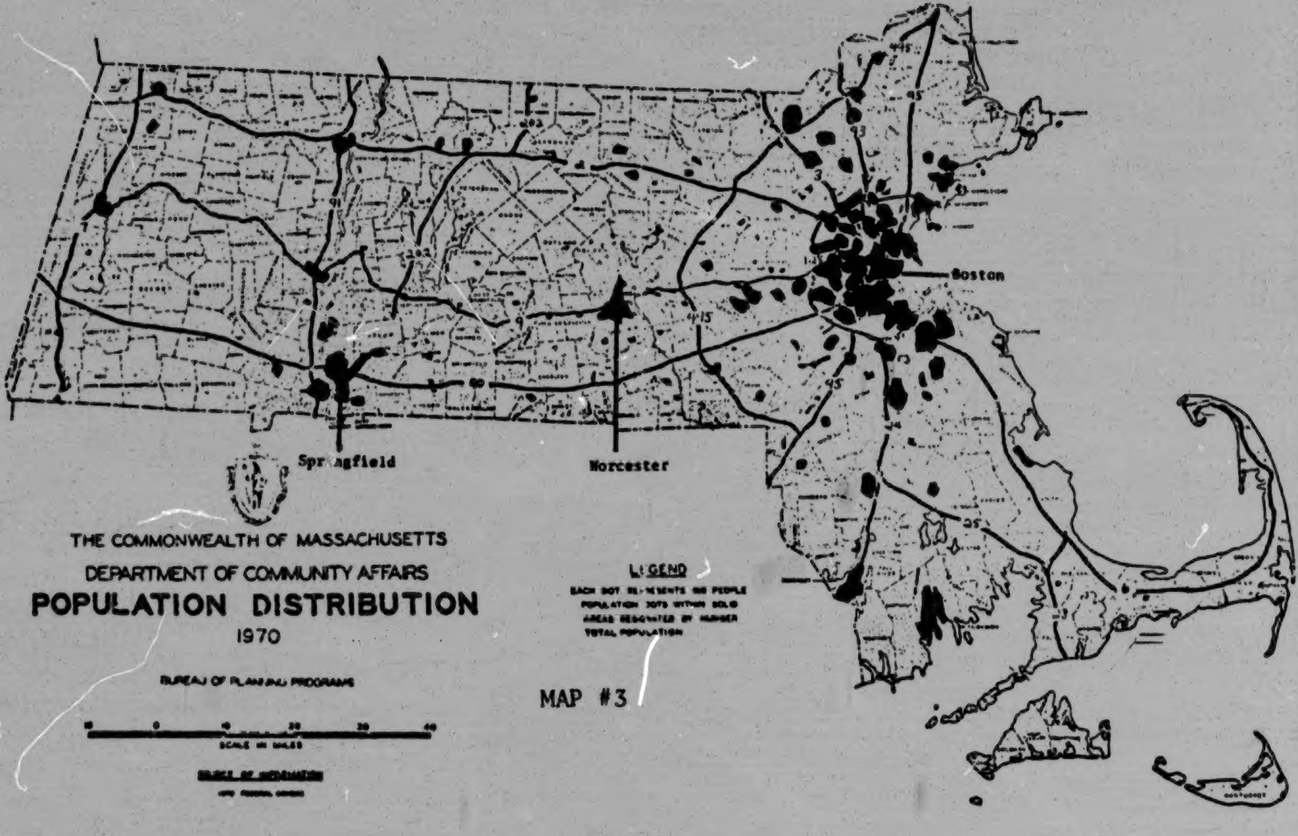
DEGREE GRANTING INSTITUTIONS

MAP #1


North Adams State
784
Greenfield C.C.
625
Mt. Wachusett C.C.
832
Fitchburg State
1811
No. Essex C.C.
1764
Lowell State
615
Merrimack
681
Lowell Tech
2279
No. Shore C.C.
5853
Endicott
8
Middlesex C.C.
2535
Salem State
2855
Berkshire C.C.
N.R.
U Mass Amherst
1881
Anna Maria
101
Worcester State
1026
Leicester J.C.
7
Quinsigamond C.C.
2298
Worcester J.C.
936
Framingham State
1286
Brandeis
212
Bentley
3246
Regis
118
Babson
736
Newton J.C.
306
Wellesley
61
Holyoke C.C.
1225
Westfield State
1617
Bay Path J.C.
(to open 1973)
Amer. Int.
263
Springfield
146
Springfield Tech
2635
Western N.E.
1968
Worcester Polytech
286
Holy Cross
27
Assumption
578
Clark
1062
Quincy J.C.
1483
Dean J.C.
248
Massasoit C.C.
21430
Stonehill
772
Wheaton
22
Bridgewater State
3437
Boston State 4296
Northeastern 15101
Boston Univ 7511
U Mass Boston 212
Emmanuel 9
Garland J.C. 10
Simmons 759
Wheelock 267
Wentworth 1009
Suffolk 1710
Grahm J.C. 18
Radcliffe 259
Harvard 4869
Lesley 489
Pine Manor J.C. 8
Boston College 2031
Hebrew T.C. 140
Mt. Ida J.C. 6
Mass Bay C.C. 2131
Tufts 68
Curry 193
Emerson 78
Lasell J.C. 40
Mass College of Art 300
Mass. Maritime
Bristol C.C.
2116
Southeastern Mass U
1522
Cape Cod C.C.
192
N

DEGREE GRANTING INSTITUTIONS WITH PART-TIME AND CONTINUING EDUCATION ENROLLMENT TOTALS

MAP #2


Boston
Springfield
Worcester
THE COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF COMMUNITY AFFAIRS
POPULATION DISTRIBUTION
1970
BUREAU OF PLANNING PROGRAMS
0
10
20
30
40
SCALE IN MILES
LEGEND
95
495
3
25

MAP #3

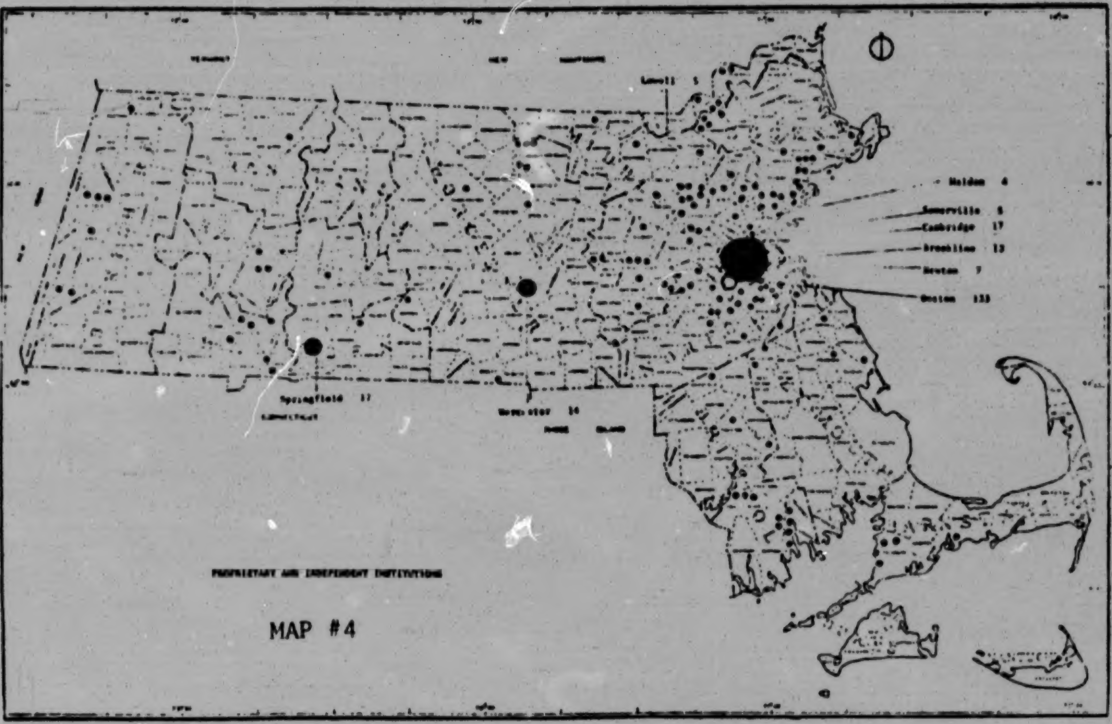
Geographic Distribution of Periphery Institutions

Map #4 shows the distribution of proprietary and independent institutions across the State. Included are schools which have either a full-time or part-time program or both. These institutions are clearly concentrated in the metropolitan areas, particularly Boston. This concentration may be explained by several factors. First, competition from public institutions has until recently been minimal in the Boston area. Secondly, some specialty schools such as florist and cooking schools must be in large centers of population to draw enough students.

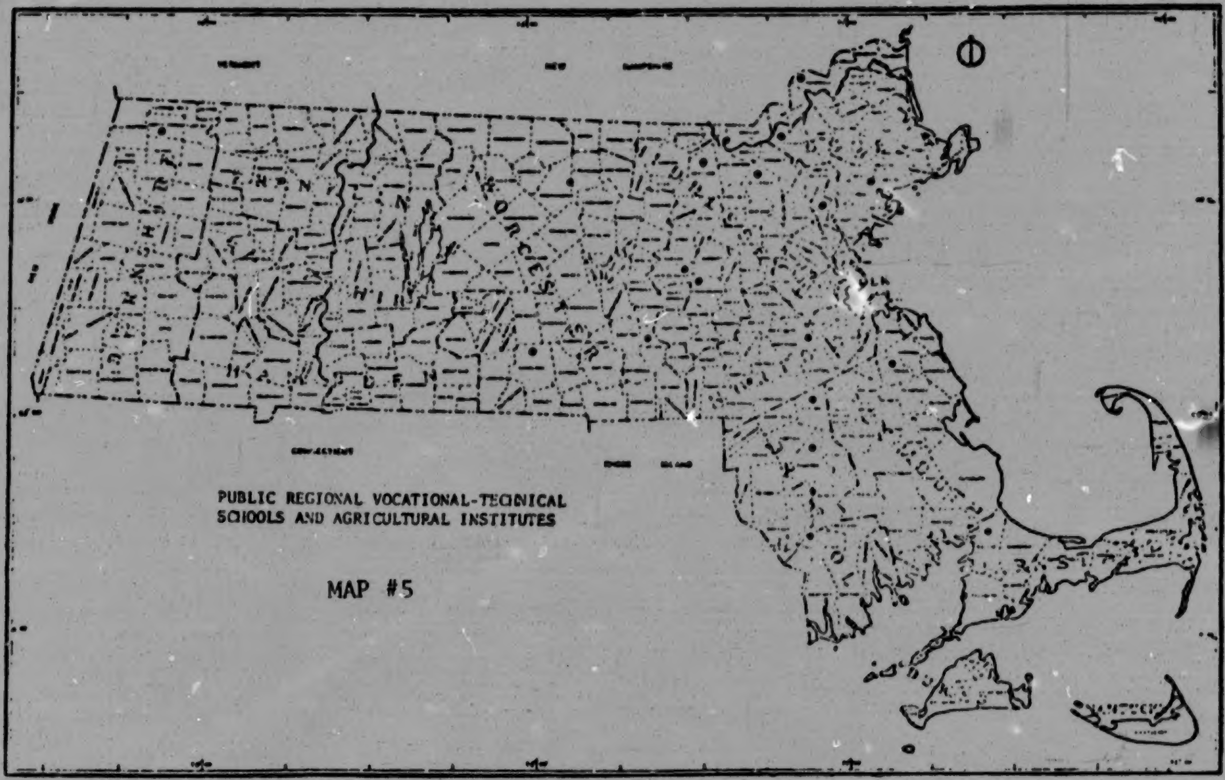
Map #5 shows the distribution of public regional vocational-technical schools and agricultural institutes. They appear to be randomly spread across the State, and significantly not concentrated in Boston. This may be because proprietary institutions and other local technical institutions are currently serving vocational needs in Boston.

Map #6 shows the distribution of adult education programs in the public school systems which have courses beyond basic education. An adult education program is required in any city over 50,000. Thus, the programs are spread across the urban and suburban areas. The Boston area is also served by the extensive programs of the private non-profit Boston and Cambridge Centers for Adult Education.

Home study and correspondence schools also serve Massachusetts residents, but there is no generalizable pattern of residence of students across the State. Some schools draw from small towns, others from the Boston area.

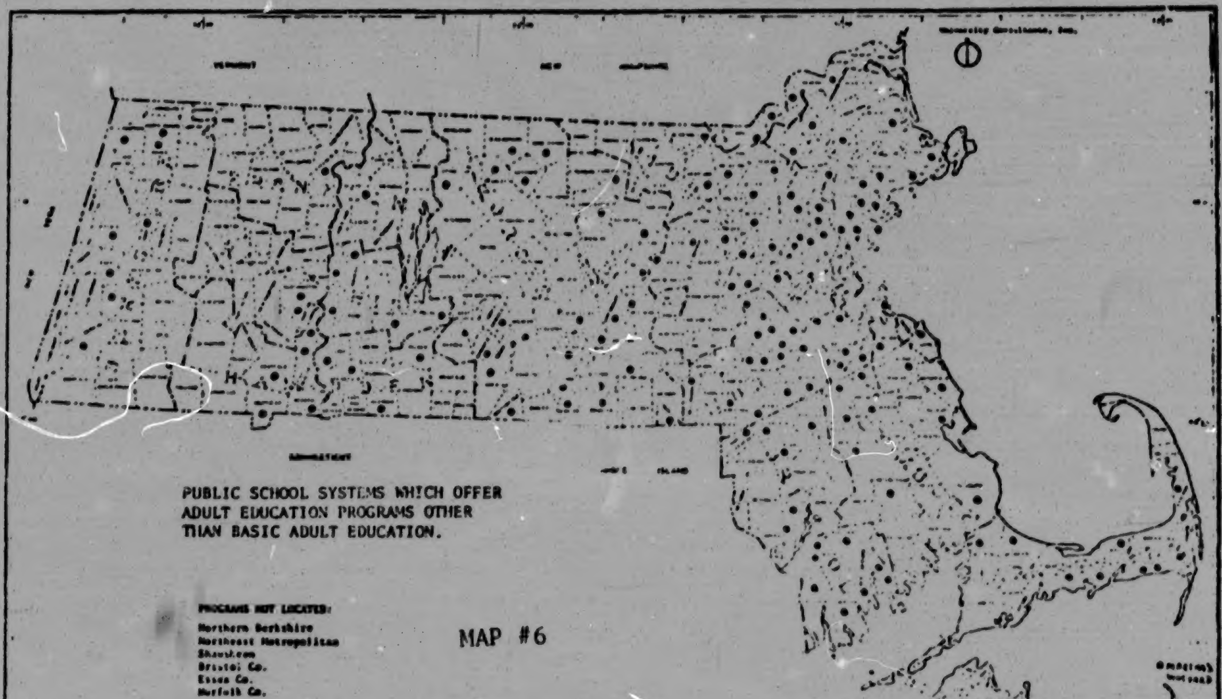


MAP #4



PUBLIC REGIONAL VOCATIONAL-TECHNICAL SCHOOLS AND AGRICULTURAL INSTITUTES

MAP #5



PUBLIC SCHOOL SYSTEMS WHICH OFFER ADULT EDUCATION PROGRAMS OTHER THAN BASIC ADULT EDUCATION.

PROGRAMS NOT LOCATED:
Northern Berkshire
Northeast Metropolitan
Shawsheen
Bristol Co.
Essex Co.
Norfolk Co.

MAP #6

The Determination of Thirteen Geographic Service Areas

In order to accurately define currently existing service areas, each degree-granting institution with part-time or continuing education students was asked for a breakdown of town of residence of their students. These listings were used to construct "Residence of Students" maps for each program of continuing or part-time education. Towns from which large numbers of students came to attend classes were shaded in heavily on the maps, towns with few or no students left blank.

Analysis of these residence maps revealed the following: Student attendance was determined by three main factors: proximity to the campus of concentrations of population, location of major highway systems, and location of branch campuses. Second, thirteen discrete service areas could be defined to represent areas of availability of programs from the point of view of the students and the areas of program competition or overlap, etc.

Thirteen areas as delineated are, from west to east, Springfield area, Pittsfield/North Adams area, Amherst/Northampton area, Worcester area, Fitchburg/Gardner area, Framingham area, Lynn/Salem area, Andover/Lowell area, Burlington/Bedford area, Brockton area, Fall River/New Bedford area, Falmouth/Barnstable area, and the Boston area. The schools providing services in each area are listed below.

GEOGRAPHIC SERVICE AREAS OF CORE (DEGREE-GRANTING) INSTITUTIONS WITH CONTINUING AND PART-TIME EDUCATION PROGRAMS

SPRINGFIELD AREA

American International College
Bay Path Junior College
Holyoke Community College
Springfield College
Springfield Technical Community College
Western New England College
Westfield State College

PITTSFIELD/NORTH ADAMS AREA

Berkshire Community College
North Adams State College

AMHERST/NORTHAMPTON AREA

U./Mass.-Amherst
Greenfield Community College

WORCESTER AREA

Anna Maria College for Women
Assumption College
Clark University
College of the Holy Cross
Leicester Junior College
Quinsigamond Community College
Worcester Junior College
Worcester Polytechnic Institute
Worcester State College

FITCHBURG/GARDNER AREA

Fitchburg State College
Mt. Wachusett Community College

FRAMINGHAM AREA

Framingham State College
Northeastern Branches

LYNN/SALEM AREA

Endicott Junior College
North Shore Community College
Northeastern - Lynn
Salem State College

ANDOVER/LOWELL AREA

Lowell State College
Lowell Tech. Institute
Merrimack College
Northeastern - Haverhill
Northern Essex Community College

BURLINGTON/BEDFORD AREA

Middlesex Community College
Northeastern - Burlington

BROCKTON AREA

Bridgewater State College
Dean Junior College
Massasoit Community College
Stonehill College
Wheaton College

FALL RIVER/NEW BEDFORD AREA

Bristol Community College
Southeastern Mass. University

FALMOUTH/BARNSTABLE AREA

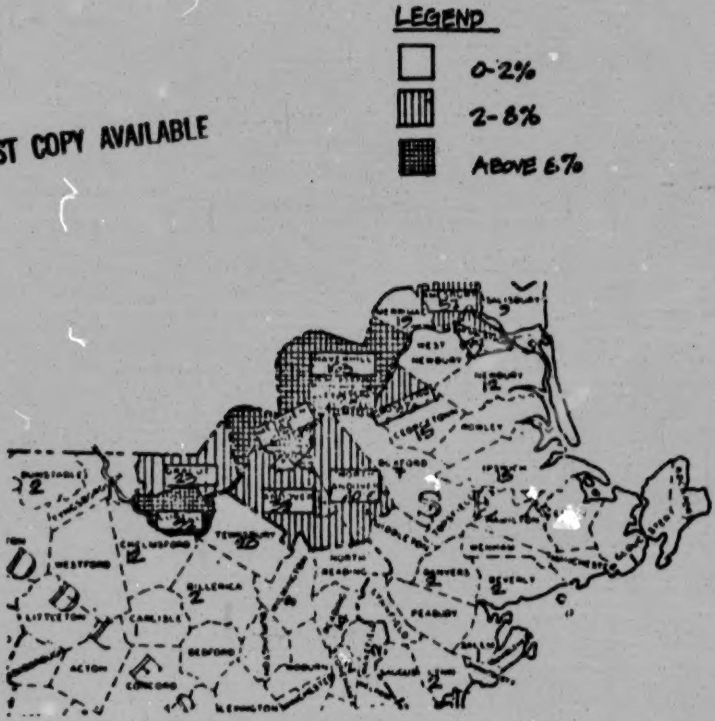
Cape Cod Community College
Mass. Maritime Academy

BOSTON AREA

Babson College
Bentley College
Boston College
Boston State College
Boston University
Brandeis University
Curry College
Emerson College
Emmanuel College
Garland Junior College
Grahm Junior College
Harvard University
Hebrew Teachers College
Lasell Junior College
Lesley College
Mass. Bay Community College
Mass. College of Art
Middlesex Community College - branch
Mount Ida Junior College
Newton Junior College
Northeastern University
Pine Manor Junior College
Quincy Junior College
Radcliffe College
Regis College
Simmons College
Suffolk University
Tufts University
U./Mass.-Boston
Wellesley College
Wentworth Institute
Wheelock College

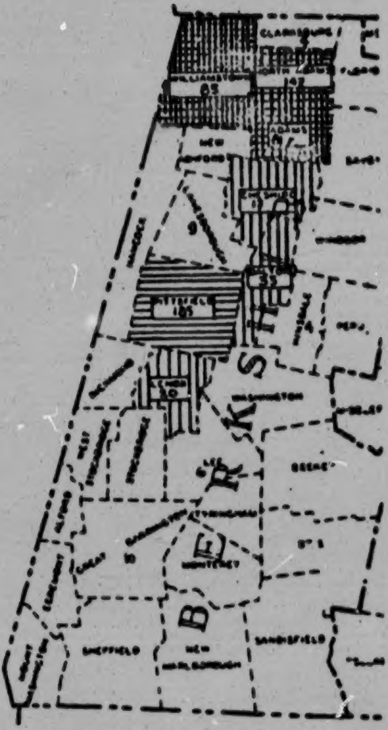
The residence map for Northern Essex Community College in the Andover/Lowell area is shown here to demonstrate the delineation of the service areas. This map shows clearly the major determinants of attendance in the program. First, attendance is determined by concentration of population. In this case, both Lowell and Lawrence, cities of heaviest population density, are heavily represented in the attendance pattern. Second, highways play a role in cutting down the time/distance factor for towns along the highway. In this case, Route #495 running from northeast to southwest along the Merrimack River Valley facilitates attendance of students along its corridor. Finally, the attendance map for North Adams State College is included to demonstrate the effect of a branch campus program in Pittsfield on the concentration of students from that city. See pp. II-37-130 of Volume II, the Technical Report, for all residence maps.

BEST COPY AVAILABLE



RESIDENCE OF STUDENTS
ATTENDING EVENING SCHOOL.

NORTHERN ESSEX C.C.
TOTAL REPORTED: 1026



RESIDENCE OF STUDENTS
ATTENDING CONTINUING
EDUCATION.

NORTH ADAMS STATE COLLEGE
TOTAL REPORTED: 758

NOTE: TOWNS WITH LESS THAN 4 STUDENTS ARE OMITTED.

Analysis for Thirteen Service Areas

These thirteen service areas as defined from attendance maps were studied in depth with respect to the key issues to be addressed in the Study. Analysis was made of trends in enrollments, program scope and comprehensiveness, outreach, admissions, and guidance, and clientele demand for programs. Certain issues were examined on a Statewide basis -- administration and finance, educational technology use, transfer policies, relationship to the periphery, and others. These cases are ones where differences are greater among types of institutions than among service areas or where the results of the analysis do not vary across the State.

In some cases, the thirteen service areas were further aggregated into five "regions" according to the suggested regional plan under proposed Educational Reorganization and the general movement to uniform substate planning regions encouraged by the federal government. Analysis according to these five regions was necessary or desirable in cases where comparative information was available broken down by the five regions. Peripheral institutions fall less clearly into the thirteen service areas as defined by the currently functioning degree-granting programs. However, their services have also been incorporated into the analysis on a service area basis.

IV.A.2. Branch Campuses and Satellite Teaching Centers

In analyzing activities of institutions beyond or outside of their main campus, two types of programs became evident: 1) branch campuses, and 2) satellite teaching centers. For the purposes of this report, a branch campus is defined as a location where the offering of courses is continued over time and is open to the general public. In some cases students may take most or all of their courses required for a degree at a branch campus. A satellite teaching center is defined as a more specific program which may or may not run for several years but is oriented towards a nongeneral clientele such as in-service teachers, law enforcement officers, or a head start program. The general public would be excluded from courses in these centers.

Branch campuses in large numbers are a relatively recent phenomenon; most of the earliest were set up in 1967-68, but the majority in 1971-72. Northeastern started the pattern in the early 1960's, but it now appears that more public institutions than private institutions have branch campuses and satellite teaching centers many of which are located near and competing with older institutions or branch campuses. Satellite teaching centers are usually started in response to specific needs of the particular client group involved.

Strengths and Weaknesses of Branch Campuses and Satellite Teaching Centers

The benefits of having branch campuses are: (a) they bring the services closer to the people and geographic proximity is an important determinant of attendance; (b) in the case of in-service satellite teaching centers, it is easy for students to incorporate work and classroom time.

The danger of opening branch campuses is that they will attract students from other schools through "skimming" of the high enrollment, profitable courses, and will upset the balance of institutions in the area. Institutions may open a branch campus in a different area, offer three or four general lower division courses and attract many students at lower prices than other instituions in the area which need lower division enrollments to subsidize the more expensive upper division programs.

For detailed characteristics of off campus activities in continuing education and maps of locations of branch campuses and satellite teaching centers, see pp. II-333 - 373 of Volume II, the Technical Report.

IV.A.3. Enrollments and Enrollment Trends

Headcount enrollments or number of people in continuing and part-time programs in the degree-granting institutions considered totalled 110,270 in the Fall of 1972. Most of these enrollments, 90,931, were in continuing education or evening divisions as separate from part-time study in full-time programs. Public enrollments were 59,430 (50,537 in continuing education and 8,893 in part-time programs); while private enrollments were 50,840 (40,394 in continuing education and 10,446 in part-time programs). Totals are not available for peripheral institutions across the state since some did not submit data.

	HEADCOUNT OF ENROLLED STUDENTS IN CONTINUING EDUCATION			HEADCOUNT OF STUDENTS ENROLLED PART-TIME IN FULL-TIME PROGRAM		
	Undergrad	Grad	Total	Undergrad	Grad	Total
U. Mass.	1,533	59	1,592	501	2,495	2,996
State Colleges	6,627	11,357	17,984	667	3,660	4,327
Comm. Colleges	25,497	--	25,497	508	--	508
Other	5,324	140	5,464	1,052	10	1,062
PUBLIC TOTAL	38,981	11,556	50,537	2,728	6,165	8,893
PRIVATE TOTAL	37,786	2,608	40,394	1,437	9,009	10,446
TOTAL:	76,767	14,164	90,931	4,165	15,174	19,339

Trends in Enrollments

Trends in student enrollments are analyzed for the following reasons: first, to place in perspective the current programs and services with their development in the past; second, to illuminate areas of program growth and of competition among types of institutions.

To compare trends in enrollments among institutions over the period from 1963 to 1972, Fall term headcounts were graphed for both continuing studies programs and part-time students in full-time programs. Area trend charts were constructed to trace the effects of interinstitutional competition. In examining trends in enrollments, it it is important to consider who in each of thirteen service areas first started a given program in a given subject and which programs were competitive. These key events in each of thirteen service areas were considered in relation to the area trend charts. The charts and lists of events are presented on pp. II-137-236 of Volume II, the Technical Report.

Among the general trends visible for this data are:

1) Enrollments of part-time students in full-time programs are low and rose very slightly over the ten year period. In 1972 the total number of part-time students (with 8 or less credit/hours per semester) was about 19,000 statewide. Most schools experienced a very slight increase in part-time enrollments over the 10 year period. A major exception is the fall in enrollments in graduate programs at Northeastern.

2) Enrollments of continuing education students rose substantially over the ten year period. In 1972 the total number of continuing education students was 90,931 statewide. Enrollment trends varied significantly, however, among types of institutions and across the geographic service areas. Following are generalizations from the institutional and area trend charts for continuing studies programs. Complete trend data are displayed on pp. II-137-236 of Volume II, the Technical Report.

First, the enrollment increases, particularly over the last few years, are largely accounted for by growth in public programs. The community colleges opening over the last ten years have expanded enrollments each year to enrollments now totalling over 25,000 across the State. State colleges have also expanded, to about 18,000 as well as U./Mass.-Amherst to 1,600, S.M.U. to 1,600 and L.T.I. to 2,300.

Second, enrollments in private colleges and universities have typically declined in the last few years. In many cases the decline is explained by a drop in undergraduate enrollments, while graduate enrollments have risen.

Thus there is clear evidence that enrollments in public programs have in many cases expanded at the expense of private college programs. Even when the private programs have not declined but remained stable, it is clear that the growth in a given geographic service area has been at the public institution. The primary competition between public and private institutions has been at the undergraduate level: the private institutions in several cases have seen a drop in undergraduate and a rise in graduate enrollments. More new public graduate programs would probably reduce graduate enrollments as well.

The public/private interrelationships become more apparent when examining trends in specific geographic service areas. There are three areas in the state where private programs have been historically strong: Springfield, Worcester, and Boston. In Springfield the enrollments of all three private institutions fell, while enrollments in the publics rose. Overall totals would have remained stable for the Springfield area but for the rapid growth of Springfield Technical Community College. Worcester area continuing studies programs were relatively stable in terms of enrollments, again with the exception of a public community college: Quinsigamond. The Boston area has seen relatively stable enrollment levels over the last several years, but the opening of two new community colleges may lead to a drop in enrollment in private programs.

Intense public/private competition is revealed in the Burlington, Framingham and Lynn/Salem areas. Northeastern opened branch campuses in the mid 1960's in Burlington, Framingham and Lynn, responding to the need for programs in these then underserved areas. In the late 1960's public campuses were opened which have increased enrollments concurrently with decreases in Northeastern enrollments. In Burlington/Bedford, Middlesex Community College has experienced rapid growth while Northeastern's University College and Lincoln College have, with the exception of last year, seen enrollment declines in the relevant years of competition. Competition for the Framingham branch campus of Northeastern has come from Framingham State; for the Lynn branch campus, from North Shore Community College and Salem State. Similar enrollment trends can be traced in these areas.

There was a tradition of continuing education in these metropolitan areas with both public and private institutions operating for many years. Enrollments in other geographic areas, however, have shown rapid overall growth where private schools ten years ago were not serving continuing education students. When public campuses were opened enrollment rapidly increased. The Fitchburg/Gardner area experienced rapid increases in enrollments, due to programs at the two public campuses, Mt. Wachusett and Fitchburg State. Andover/Lowell has also seen expansion of enrollments due to programs opening up at Northern Essex and Lowell State. The one private program in the area, Merrimack, had an enrollment decline, as did Lowell Tech. Enrollments in programs in southeastern Massachusetts also rose due to opening of public programs.

Third, enrollment increases varied by type of program. It appears that State colleges with a traditional focus on education programs have had only slight increases in enrollments, while State colleges with a broader program have seen rapid increases (Westfield, North Adams, and Worcester vs. Fitchburg, Framingham, Lowell, Bridgewater, and Boston State). Finally, technical programs have seen enrollment decreases at Northeastern (Lincoln College) and at Lowell Tech. Worcester Polytech showed only a slight enrollment increase in the last year, while Springfield Tech Community College showed a marked increase.

Fourth, trends in enrollments appeared to have a noticeable break in 1969 or 1970. Enrollments at private institutions in particular began to fall. Other enrollment trends upwards slackened off. This effect was less noticeable for the public community colleges. Several reasons may be behind this break. There was probably a degree of disillusionment about education with the press of student demonstrations, etc. As the economy began to suffer in those years, the incentives of continuing education for job and financial rewards were lowered. Firms which had been supporting employees as part-time students under government contract write-offs decreased the amount of their subsidies. Students on their own saw less value in continuing education and had fewer resources to pay for programs in the face of higher unemployment rates and rising costs. The enrollment effects were again felt most strongly in the private institutions which charge the highest tuitions and least in the public community colleges. The enrollments in technical subjects were most affected by the faltering job market, as in Northeastern's Lincoln College and graduate engineering programs.

There are instances of negative effects of competition from public programs on the proprietaries; the closure of Bryant-McIntosh in the Lynn/Salem area, Lowell Commercial College in the Andover/Lowell area and others. The major impact on proprietaries will not be felt however until the opening of planned comparable public programs in Boston, the center of activities of proprietary institutions.

Adult education programs have by and large increased enrollments, some dramatically. Even in areas with surrounding community colleges expanding noncredit programs, such as North Shore C.C., Middlesex C.C., and Framingham State College, enrollments have risen in the high school programs. The extent of increase is indicative of the nationwide trend to increasing participation in noncredit adult education. Other causes of increasing enrollments are shifts and growth in population in the suburban areas and the rising cost of food and household items forcing women back into practical arts courses.

Home study schools reporting trend data all showed a drop in enrollments in Massachusetts over the last few years. Perhaps this may be explained by the increasing competition from new continuing education programs in the public sector in geographic areas previously unserved.

For area trend charts of enrollments and listings of key events in each area and trend charts for individual degree-granting institutions, see pp. II-133-236 of Volume II, the Technical Report. For trend charts of enrollments of peripheral institutions, see pp. II-527-588.

IV.A.4. An Inventory of Continuing Education and Part-time Programs

In theory, the full range of regular institutional program offerings is available to part-time students in full-time programs. It is access to, rather than the mere existence of, programs that determines the nature of part-time study opportunities in full-time programs. Access factors include admissions policies, availability of financial aid, tuition costs, willingness of school to enroll part-time students, and the availability of special services.

In a sense, continuing education can likewise be viewed as based on regular, full-time programs. Demand factors compel a continuing education program to draw upon faculty and course resources in the regular division of the institution, just as is the case in part-time study. While a continuing education program in many ways reflects the parent institution's full-time academic offerings, it quite often reaches beyond the limits of those offerings through the use of adjunct faculty and specially designed courses. It can thus be distinguished from part-time study in full-time programs, and requires a separate analysis.

Continuing Education

Providers of continuing education can generally be grouped into different function categories. The community and junior colleges offer lower division courses leading to associate degrees, with a focus on either job placement or transfer to a four-year institution. The State colleges provide the bulk of graduate continuing education programs in the field of education, although some bachelor's degree programs are available. The private four-year colleges and universities offer academic degree programs at both the baccalaureate and graduate levels. Proprietary and independent institutions specialize in certificate or skill programs which are occupationally oriented, usually in business or technological fields. The avocational needs and interests of an area's adult population are catered to by a mix of municipal adult education programs and "community service" courses of degree-granting colleges and universities.

In most areas, these factors have resulted in an emphasis on business and technical courses, subjects in which the market is large, the demand is high, and employers are willing to underwrite tuition costs for their employees. Similarly, law enforcement, fire science, and education programs are popular because government tuition assistance and job incentives create a large demand for courses in these fields.

Beyond these large programs, much of the remainder of continuing education activity occurs at three levels: 1) general studies programs at two-year institutions covering a wide range of academic areas but with little depth; 2) noncredit, specialized interest courses for adults; and 3) job-oriented programs at "periphery" institutions, especially in the metropolitan Boston, Worcester, and Springfield areas.

While this system seemingly works to broaden postsecondary educational opportunities for adults without undue duplication of resources, it breaks down under the influence of any one of these factors: 1) the presence of several institutions of the same type, resulting in a duplication of programs in high demand subject fields; 2) the lack of some provider type, resulting in the unavailability of its particular educational program; 3) the tendency of degree-granting institutions to offer a broader range of courses than degrees, resulting in competition over the large number of nondegree students; 4) the tendency of continuing education programs to meet the market demand by concentrating resources in popular subjects, to the exclusion of some less profitable but nonetheless needed fields.

Where schools are numerous and population density is high, the competition between institutions seems to be intense. One area in which this can be seen is the greater Springfield area, where two community colleges (Holyoke and Springfield Tech.), three private colleges (American International, Western New England, and Springfield), and a State College (Westfield) have been vying for their share of the area's educational market. One apparent result has been the widespread planning for new degree programs, attempts designed to tap new markets in an area already saturated with educational opportunities. Westfield State is planning ten new bachelor's degrees, most of them in fields where there are no such existing programs in the area. Two private colleges are planning new master's degrees in education, a field which already has a high concentration of academic opportunities. Bay Path Junior College is planning to embark on its first degree program this year, offering an associate degree in liberal arts, child study, and mental health.

A somewhat similar situation in the Worcester area--several institutions of different types and a large population--has fostered a slightly different set of continuing education programs. Duplication of degrees is virtually nonexistent, the only cases involving Quinsigamond Community College and Worcester Junior College in associate level business and liberal studies programs where the competition is severe and to the detriment of Worcester Junior College. But while the available degrees cover a range of subjects almost as varied as in Springfield, the same kind of depth is lacking. Articulation from associate to higher level degrees is possible in only business and general studies. Graduate level programs are strong in education and engineering, but opportunities in other subjects are quite limited. In Worcester, as in Springfield, an active adult education program offers many noncredit, special interest courses that supplement the degree and course offerings in the colleges and universities.

In contrast, the continuing education programs in the Southeast do not cover many fields, nor do they allow degree articulation. The heaviest concentration of academic degree courses occurs in business administration. Bridgewater State has extensive master's programs in education, but only one school in the region offers an education degree below the graduate level (Associate in elementary education at Bristol

Community College). The only engineering degrees available are at the associate level, closing off any opportunity for advanced work in the field for area residents. Only one institution, Southeastern Massachusetts University, offers degrees at the baccalaureate level, in business administration and humanities. Thus, even combining the three areas in the region, the picture is one of low levels of competition, limited scope of degree programs, and few opportunities for degree articulation.

Another unique situation occurs in the Northeast region, where public and private institutions are competing at several levels. Northeastern University operates three branch campuses in the region, which have experienced declining enrollments since the opening of several, lower priced community colleges. Most of this competition occurs at a course level, since Northeastern degrees are available only at the Burlington campus in a few fields. Articulation is especially well-provided for in engineering in the Andover/Lowell area, where Lowell Technological Institute expanded its bachelor's programs as the community colleges entered the engineering technology fields at the associate degree level. Similar articulation in business degrees is apparent. Expansion is planned in the already broadly covered occupational areas to meet future employment demands. Middlesex, for example, will institute two associate degrees in the growing health services field.

There are other areas in the State, such as in Pittsfield/North Adams, where the limited number of educational providers is the primary determinant of study opportunities. In contrast to Worcester and Springfield, program scope and articulation in these areas are severely limited in all but a few fields.

Full data on each area is presented on pp. II-239-316 of Volume II, the Technical Report, from which the above conclusions regarding continuing education programs were drawn. The 13 geographic service areas, as described above on page 19 are delineated in terms of academic and occupational programs. Program overlaps and gaps are specifically noted, providing a detailed frame of reference for future area program planning.

Part-time in Full-time Programs

Throughout the State, few special opportunities exist for part-time study within the regular full-time program. General constraints of limited space and financing tend to inhibit the expenditure of institutional resources on part-time students. Many schools -- particularly those in the private sector -- limit these part-time offerings to students who are only temporarily reducing their course load but who are primarily full-time students. Other special students, such as those who are taking one or two courses at an institution as part of a cooperative cross-registration arrangement, comprise the remainder of the part-time students in full-time programs at many schools.

With few exceptions, colleges and universities in Massachusetts follow these policies regarding part-time students in full-time programs:

1) All full-time courses of instruction are open to part-time students, once one is accepted into part-time student status.

2) The total number of part-time students in full-time programs is small, about 19,000 Statewide, reflecting the general practice of allowing part-time status as the exception rather than the rule in regular full-time programs.

3) The same admissions standards apply to full-time and part-time matriculated degree candidates. This usually means matriculation at the time of entry, in contrast to continuing education programs which usually have open admissions and later matriculation.

4) Schools that allow part-time study on a nonmatriculated basis allow part-time students to enroll on a space-available basis without formal admissions requirements.

5) Costs charged for part-time students at private schools are calculated based on prorated semester tuition rates. Public institutions charge on a credit-hour or course basis that generally results in a higher cost per course for part-time than full-time students.

6) Little or no financial aid is available for part-time students.

7) Few special services such as counseling and advising are provided for part-time students.

8) Most programs in the full-time program are only available in the daytime, which limits the part-time study opportunities to those who are free to take courses during those hours.

9) Although most schools accept CLEP examination credits (up to 30 credit hours), few offer or plan to offer such external learning devices as credit for experience.

One major distinction between public and private schools appears to be operating with regard to part-time students. The private institutions, which often are not filled to capacity in many program areas, often view part-time students as a means to increase enrollments without incurring substantial new costs in terms of faculty pay and other services. Thus, although limited by the high fees they charge these schools allow increased part-time enrollments in full-time programs so long as these programs remain below capacity. Public schools, on the other hand, find that State formulas that provide funding on the basis of number of full-time students rather than on the basis of full-time equivalent students (FTE), make enrollment of part-time students in already crowded full-time programs a drain on resources available for services to full-time students. In these schools, the emphasis on part-time study is found in the division of continuing education rather than as part of the regular full-time programs.

Specially designed part-time programs available at Massachusetts colleges and universities include: U./Mass. - Amherst's Pittsfield MBA program; Extended Learning Program at Worcester State; MBA in management at Clark University; and a new degree program for prisoners at U./Mass. - Boston. Graduate programs at Northeastern, Boston College, Suffolk, Babson, and Boston University enroll large numbers of part-time students. U./Mass. - Boston and Lowell State have no continuing education programs per se, but include all part-time students in their full-time programs. More detailed discussion of part-time programs and the extent of their utilization in terms of credit hours of enrollment are provided on pp. II-317-330 of Volume II, the Technical Report.

Programs in Periphery Institutions

Proprietary Institutions

Proprietary vocational schools fall into five categories: (1) business and office occupations (2) skill trades and technical, (3) cosmetology, (4) medical and health, and (5) all others. The bulk of part-time students in proprietary school programs are found in a separate evening division rather than as part of a full-time program.

Proprietary business schools for the most part do not offer comparable programs to those at the community colleges. The business school program is less comprehensive and does not normally lead to a degree. But, since many evening school students enroll on a course by course basis, the duplication of such courses as shorthand, typing, accounting, and other business subjects has the effect of siphoning off enough enrollment to make them unprofitable. An example of this is in New Bedford, where public institutions are offering programs on a course by course basis which competes directly with the only remaining proprietary business school in the area: Plus, Kinyon & Campbell. The latter has now decided to discontinue all evening courses with the exception of typing.

There are a number of examples where proprietary business schools have gone out of business often because of competition from lower-priced public programs and branch campuses opening in their geographic area. The loss of part-time and continuing education programs is as much affected by competition for full-time day students as it is by competition for continuing education evening students. Typically, proprietary business schools have few part-time students (students enrolled for less than a full-time program in the day-time division).

In 1972 it became possible for any two-year programs to apply to the Board of Higher Education for degree-granting status. Several business schools are now seriously considering becoming degree-granting.

They wish to do so primarily to improve their competitive position with institutions now offering degrees. While the opportunity to award the degree to evening students could exist, there is no evidence that either the students attending private business schools or the schools themselves see this as a major goal. It is for the full-time day students that these institutions are interested in the associate degree. Such schools as Salter Secretarial, Katherine Gibbs, Bryant and Stratton, Andover School of Business and Chandler have indicated their intentions to file for degree-granting status.

Proprietary trade and technical schools have not found competition from the lower-priced public programs on the postsecondary level to be their main source of competition. Because of the present academic structure at community colleges there is little in the way of direct competition on a course by course comparison. However, one notable example which runs counter to the pattern is Springfield Technical Community College, with its strong course offerings in all the various trade and technical skills. The main source of competition is from the now expanding regional vocational-technical schools which offer evening and adult programs at their facilities. As these schools become more numerous, there will be a definite competitive squeeze on the existing proprietaries.

There is little competition with public institutions on the postsecondary level in the field of cosmetology. The main concern is the movement within the public secondary school sector to expand vocational offerings into the cosmetology field. A school that has gone out of business because of competition from Upper Cape Cod Vocational Technical School is Rogers School of Beauty Culture. Programs now in the planning stage at other Voc/Tech's will have a similar effect on cosmetology schools in communities such as Haverhill, Framingham and Marlboro.

Most medical and health educational facilities are operated either by degree-granting institutions or hospital-affiliated schools of nursing. The few proprietary medical facilities are operating with limited curriculum. The proprietary schools choose areas of education within their field that do not come directly into competition with the public sector. They cannot compete directly with community colleges having extensive financial resources and offering courses at a low price.

None of the proprietary schools have plans to seek degree-granting privileges in this area, nor do they plan to enter the more expensive and technically involved areas such as X-ray, and medical technician. The high cost of providing lab equipment for these programs and the competition from community colleges are primary inhibitors.

The fifth category includes schools offering a wide range of programs such as truck driving, floral design, broadcasting, heavy equipment operation, aircraft maintenance, optical lens grinding, culinary, real estate, salesmanship, and many more. Because there are only a few of each dispersed throughout the State conclusions about them as a group cannot be made. However, they do share some common characteristics. Their programs are short. They offer one or two programs and their ability to serve their market is a function of economic factors, general public interest and the entrepreneurial ability to see a marketable service. These schools have no relationships with degree-granting institutions since their programs are designed to lead to a job upon completion of the course.

The number of programs available and schools entering or leaving the field is in direct proportion to the students' rising or falling interest in what the institution has to offer. Since these institutions are not comparable to the community college or other public institutions they have not competed directly. However, the trend for community colleges and other degree-granting institutions to offer courses through a division of community service may present these schools with new competition.

Regional Vocational-Technical Schools

Data on programs in the regional vocational-technical schools was obtained from the Division of Occupational Education, Massachusetts Department of Education. The information provided was that all postsecondary (or 13th and 14th grades) level programs in operation were full-time and during the day. Although evening courses are conducted, they are at the secondary level (11th and 12th grades).

However, the potential for part-time and continuing education programs at the postsecondary level exists in the regional vocational-technical schools. The greatest strength of these schools is their extensive, up-to-date facilities for technical training. No specific information is yet available on expansion of postsecondary courses into the part-time evening programs of the public regional vocational-technical schools.

Adult Education in Public Schools

The heaviest concentrations of adult education program courses are in the traditional areas of arts and crafts and family and personal interests (including home economics). A few courses are also typically offered in typing and other business skills, and in general academic areas, particularly foreign languages. Courses at the secondary level are not included in this survey. Courses in auto mechanics, carpentry, and other trade subjects are also offered by a majority of schools.

Home Study Schools

Home study schools offer courses in many of the same program areas of proprietary schools: business and office skills, trade and technical, medical and health and other skills. Correspondence schools appear to be more diversified than proprietary schools. LeSalle Extension School, for example, offers courses in all five categories. Some also offer general academic courses.

More detailed discussion and delineation of programs by subject area in periphery institutions is provided on pp. II-573-588 of Volume II, the Technical Report.

IV.A.5. Nontraditional Programs

Antecedents of the Nontraditional Study Movement in Massachusetts

Nontraditional study (defined in the proposal for a Massachusetts Open University as "any mode of learning other than full-time, day session, classroom instruction"[10]) in Massachusetts has received a great deal of attention in the last couple of years, and it is therefore easy to view current innovations as being unique and unprecedented. These include experiential learning, media experiments, modes of home and independent study, calendar and schedule changes and others (e.g., the British Open University model is nontraditional in its use of teaching teams, media, home study, learning centers, etc. and the University Without Walls involves experiential learning formats).

As significant as these major efforts are, to see them and the spin-offs stemming from them in Massachusetts as totally new is not quite correct. Such a view neglects many other highly significant innovations over the last couple of decades. It is worth reflecting therefore on the antecedents of current innovations.

In this State and nationally, continuing education has always had a certain "nontraditional" flair in its admissions and matriculation policies, in its responsiveness to consumer demand and in its use of nontraditional faculty on a contract basis. A few selected examples from Massachusetts illustrate the continuous process of innovations along nontraditional lines in the continuing and part-time education system in Massachusetts.

Northeastern and Western New England College have long accorded part-time self-paced (day and evening) learning an equal status to the traditional full-time-day model, as have many other institutions to a lesser degree. Further, both institutions have used outside faculty as well as traditional faculty. Proprietary institutions have similarly been innovative in recruitment and use of faculty and in flexibly scheduling programs to facilitate part-time study while working and/or time-shortened program options. The integration of work experience with formal study has occurred quite naturally in all continuing education programs for those part-time students whose study is related to their employment.

Insofar as introducing new courses and programs of study are concerned, proprietary schools, Boston University and Northeastern University have shown great innovativeness over the last decade, usually being the first institutions in the Boston area to introduce new courses and programs of part-time study later duplicated at other institutions.

CLEP and other credit by examination options have been used in several continuing education programs, as have (more recently) credit for life experience. Correspondence based independent study and media (TV) instruction have been employed by the Mass. Department of Education, particularly prior to 1965 when all responsibility for postsecondary instruction of this kind was removed from the Department.

Branch campuses to provide education programs to underserved clientele in several locations were opened by Northeastern University and their Adult Day Classes Program offered to serve women with children at school. Special off-campus joint cooperative programs have developed, among the most notable being the Fitchburg State College-Raytheon Company Program.

These few examples are not exhaustive but serve to illustrate that nontraditional approaches to higher education are not new to Massachusetts. What is new is the increased recognition of such approaches as legitimate by the traditional higher education (day college) world. The issue is one of attitude change -- of increased openness to nontraditional modes of study.

The "New" Nontraditional Study Movement and Continuing Education

1972-73 has seen the emergence of many new efforts focused on nontraditional learning formats in Massachusetts. College III of U./Mass. - Boston, the Worcester Consortium External Degree Proposal, and the Proposal for a Massachusetts Open University are but three of many examples. Nontraditional study, once represented by innovative efforts in continuing education programs, has suddenly become a focus of reform in traditional college programs.

Until as recently as one year ago, Massachusetts had lagged behind other large states in planning and implementing statewide systems of nontraditional studies and in encouraging and supporting the creation of individual pioneering, precedent-setting single programs. Other states had taken the lead in creating model statewide systems (such as New York, with its Regents/External Degree Program and the Empire State College), innovative segmental programs (such as Illinois' Board of Governors Degree Program or Vermont's Community College Program), or single public institutions with a special emphasis upon nontraditional learning (such as Minnesota Metropolitan State College, University of Wisconsin/Green Bay, or Evergreen State College in Washington).

Decline of traditional patterns of higher education, however, coupled with demands for new clienteles, new modes of learning, new delivery systems, and new sources of funding, are resulting in discernably new patterns of postsecondary education in Massachusetts. The conjunction of existing programs of continuing and part-time postsecondary education with newer nontraditional formats might well provide the cutting edge of higher education for the remainder of the 1970's.

For example, undergraduates at Harvard, Radcliffe, Boston University, Simmons, Wellesley, and the University of Massachusetts can now avail themselves of the Shared Experience Program providing noncredit work experience in Boston-area firms, a recent option developed by Harvard University's Office of Career Planning, and Off-Campus Learning in conjunction with Western Electric. The Institute of Open Education located at Newton College (but lately administered by the Antioch Graduate School of Education) grants the M. Ed. through a one-year work-learn arrangement. The Cambridge-Goddard Graduate School for Social Change offers a number of programs leading to an M.A. organized around a theme of radical social and political action, including a Feminist Studies Program.

Simon's Rock College focuses on early admissions for high-achieving high school students. Serving a different clientele, University Year for Action's two Massachusetts components, at U./Mass. - Amherst and U./Mass - Boston, provide twelve-month work-learn programs for local students in community-based service agencies. Boston/Roxbury University Without Walls is fairly representative of innovating urban institutions attempting "relevant learning" for the disadvantaged minority student, and at the same time retaining basic academic credibility as an educational operation.

Finally, a proposal for the Massachusetts Open University was submitted to the Board of Higher Education by the Lieutenant Governor's Interim Planning Group in February 1973.[11] The purpose of the M.O.U. will generally be to bring educational opportunity to new or unserved populations, using a wide variety of study times, places, and teaching options. The State Board of Higher Education has studied the possibilities of an open university on the British model. The attractions of the "Open" in Britain were manifest for Statewide planners. It was a national alternative system of higher education, adequately planned and fully funded, to provide competency-based instruction through local education centers, instructional media and correspondence to clientele formerly excluded and underserved by the universities.

"Open College" Pilot Programs in Massachusetts

If Massachusetts public institutions were somewhat overdue in beginning a major Statewide program of alternative education, they nonetheless had the advantage of pilot precedents in the Massachusetts State College System which launched a number of small "open college" pilot programs at several of the individual State college campuses. Salem State College was the first to begin with a program offering students an integrated course of study in the humanities. The 40 students were each assigned a faculty advisor, required to attend 36 once-a-week TV and radio tape sessions, or carry out a plan of learning through "instruction" or independent study. The Bridgewater State College program in social science included field internships and seminar/independent study formats employing video tape technology.

Fitchburg State College identified four disciplinary areas of general education--communications, mathematics, physics, and psychology--and offered courses for a total of 30 students in the undergraduate day program, vocational education, and the innovative continuing education program with the Raytheon Company described earlier and for another 20 students. Using a variety of methods, Fitchburg experimented with adapting traditional liberal arts subjects to a mix of clienteles both on and off campus by retraining selected faculty. Framingham State College began the most ambitious of the "open college" programs in January 1973. With $35,000 and space rented at the Marist College and Seminary at Framingham Center, The Framingham State College Division of Continuing Education and Special Programs began a nontraditional part-time program for 50 students which prescribes 76 hours of broad requirements, comprehensive examinations, and resident requirements. It limits to 20 hours the amounts of life experience which can be accrued toward the degree, but a wide variety of options are open for earning a degree. Students include 20 women and 30 men with an average age of 42.8 years (and a range of 21 to 75) and an average of 34 hours of college already completed. For a more detailed discussion of nontraditional programs, the University Without Walls and its "Spin-Offs"; and pilot programs in Massachusetts, see pp. II-629-639 of Volume II, the Technical Report.

IV.A.6. Employer-Based Programs

Employer groups in Massachusetts which carry on extensive education and training programs vary greatly in the kinds and character of programs they operate. This variety depends upon the nature, size, and location of the employer-group; whether it is in the public or private sector, profit or not for profit; if an industrial firm, whether it is manufacturing- or service-oriented; whether it is a "giant" (5,000 or more), "large" (1,000 or more), or "medium sized" (600 or more) employer; and whether it is located in Boston's hub, or on Route 128, or in Worcester. The employer-groups surveyed in this study were: the Raytheon Company (Missile Systems Division/Bedford Laboratories), Polaroid Corporation, the Employe Training Section of the Commonwealth's Bureau of Personnel, Honeywell (Information Services Organization), First National Bank of Boston, Boston Chapter of the American Institute of Banking, John Hancock Mutual Life Insurance Company, and the Massachusetts General Hospital.

The eight employer-sponsored education and training programs in this survey would seem to be much more heterogeneous than eight randomly surveyed college- or university-based continuing education programs might appear. For example, functional definitions of "education" range from routinized clerical and paratechnical training within personnel departments to the broadest and deepest kinds of advanced learning at doctoral and postdoctoral levels which are considered vital to the corporate missions. Some programs are emphatically "job-specific"; others are discipline, subject or problem and task-oriented; still others emphasize personal growth and development (the "whole person" approach).

Some groups rely almost exclusively on "in-house" training, educational and even academic staff resources for their programs. Others prefer extensive outside contractual relations with colleges and universities to perform all but the most "personnel related" educational tasks. The basic issues on which an employer decides to operate a program internally or externally, or through a mixture of both options, are predicated upon the training and educational needs of the organization and its judgement of the best way to meet them. How educationally oriented is the employer, i.e., how important are education and training to the organization's well-being and how extensively is this recognized by the management? Is a particular program intended to be primarily a degree opportunity for employees or primarily to provide greater job mobility within the firm? Does an organization itself possess the staff and equipment resources to provide a particular program or might these exist more readily at a nearby college continuing education facility? To what extent does the employer view its own education and training programs as confidential, of concern only to its own personnel, or to what extent are they seen as "open" and "public," of concern to a wider community? Can one employer provide a given program to its employees at less cost than a college or university or *vice versa*?

Reasons for internally based employer education programs reflect one response to these issues. The Polaroid Corporation, for example, is "educationally oriented" out of scientific and technological necessity. While degree opportunities for employees exist, in-house educational programs are a primary vehicle for job mobility within the company. Polaroid uses its own staff and facilities out of cost considerations and for reasons of greater educational effectiveness and relevance to corporate goals.

Both cost considerations and specific occupation relevance are the most commonly cited reasons for in-house education. Large service corporations such as John Hancock Mutual Life Insurance and the First National Bank maintain basic employee skills training for these reasons as opposed to "contracting out" to nearby skills centers or secretarial schools. Large scientific and technological firms such as Raytheon and Honeywell use their own staffs and educational facilities for advanced level education on these same grounds.

Reasons for externally based employer education programs are also related to cost and corporate payoff. Honeywell offers employees self-improvement courses and a range of college level liberal arts courses through community college continuing education programs as, primarily, "company benefits." The Employe Training Section of the Commonwealth's Bureau of Personnel "contracts out" many of its training and educational programs for State employees because of its own limited resources and the requisite resources possessed by colleges and universities (e.g., nursing education programs in the community colleges and management training workshops operated by the University of Massachusetts/Amherst.)

Not all employees resort exclusively to an internal or external model. Half of Massachusetts General Hospital's training and educational programs (exclusive of medicine and nursing) are done in cooperation with colleges and universities with instruction taking place in college classrooms, hospital facilities, and on-the-job training. (The other half are done entirely in-house.) First National Bank of Boston conducts most of its own training programs, while the Boston Chapter of the American Institute of Banking supplies educational programs in banking and finance. The Boston Chapter performs this function for all member institutions of the A.I.B. in addition to which it sponsors associate and bachelors degree programs in cooperation with Suffolk University.

The employer-groups surveyed not only differed in the nature of their connections with the continuing education programs of colleges and universities, but the widest possible range of feelings of satisfaction and dissatisfaction with these programs were expressed. The dominant response, however, was extreme dissatisfaction with higher education's understanding of employers' educational needs and with its ability to "deliver the goods" of relevant learning at reasonable costs and in contemporary formats. Thus, universally high interest was manifested in response to the description of the possibilities afforded by the Massachusetts Open University; e.g., employer-group control over learning content and format, independent assessment, and availability of accredited external degrees. Employers expressing moderate to high satisfaction with a particular higher educational institution, for example, did so on the basis of these "MOU" types of considerations.

For all of their diversity, employer-groups with extensive training and educational programs are alike in having a functional view of their educational operations. Educational programs exist to further the well-being of the parent organizations. Educationally, whatever furthers this end becomes the program. This specificity of missions is the chief characteristic of employer-group education and helps to explain its diversity and heteogeneity.

For a more detailed discussion of the eight employer-based programs and their interest in the Massachusetts Open University, see pp. II-613-625 and V-4-8 of Volume II, the Technical Report.

IV.A.7. Educational Technology

In the universities, two-year colleges, proprietary institutions and high schools throughout the State, programs are being produced and course materials recorded for dissemination to students within a particular institution. In only a very few instances is there evidence of any reciprocal or cooperative use of available programming or hardware. The result is costly duplication of facilities, program development and audience.

If the State is divided into geographic service areas, it is possible for technological resources and programming to be shared. Each area has sufficient hardware to create a communications network from which programming can be transmitted and distributed. Each area also has a certain amount of software programming that could be shared by institutions and thereby provide study materials for part-time and continuing education clientele.

The Study results show that most of the institutions have video tape recording capability. Further, most of the institutions have 1/2" Sony equipment, which indicates that institutions within geographic service areas have the technical capability for tape exchanges and program sharing. Study data also reveal that within each of the geographic service areas there is one or more television studio facility at which programming and recording can be accomplished. For example, a regional television network in the Boston area could be easily and inexpensively developed with the necessary cooperation, coordination and commitment by the educational institutions in that region. Northeastern University and the Archdiocese of Boston are now equipped with Instructional Television Fixed Services (ITFS) facilities. ITFS is a closed circuit television system that transmits via a series of channels in the range of frequencies around 2500 megahertz. ITFS is a valuable service and an alternative to other forms of signal delivery, such as telephone company cable or Community Antenna Television System (CATV). The ITFS channels allocated by the FCC to Northeastern University and the Boston Archdiocese can transmit programming and course material to classrooms or schools equipped with inexpensive microwave and conversion equipment.

Both Northeastern and BCTV are ideal transmission sources. They are also ideal production sources. Northeastern's Office of Educational Resources is a sophisticated production center for multimedia or single medium productions, and is now in the process of developing systems programming of course material. The process includes overall development and design of both content and presentation, using the media that is most effective for any particular course.

The Boston Catholic Television Center is an excellent production facility with knowledgeable staff and outstanding complementary resources that are shared with the Education Development Center. The Education Development Center is a curriculum laboratory with exceptional staff and facilities for curriculum development, and for television, film and audio production. EDC is also linked up with Boston Catholic Television's ITFS system and with WGBH-TV via a cable link.

In short, a concerted effort to develop existing facilities would provide higher education institutions with a closed television network that would be used to transmit course material within geographic service areas and throughout the State.

Many universities produce video or audio tapes that are then transmitted internally to classes. These individual programs and projects around the State utilize technology. Still, because of inadequate financing and no centralized planning, accomplishments on the part of individual institutions fall short of the ideal. To avoid duplications of effort, arrangements could be initiated among various institutions to pool resources, talent and budgets. Reciprocal tape exchange arrangements could be made within each geographic service area.

Other technological possibilities are available to support efforts of educational coordination and planning in geographic service areas and throughout the State. These include regional cable television networks which can be effected by cable companies - e.g., Pioneer Valley in Western Massachusetts - picking up educational channels and sending programs to subscribing communities in a region. Radio channels can be used on a closed circuit basis (side channels) to broadcast particular programs in a manner similar to the broadcasting of muzak to subscribing organizations. Finally commercial radio and television could be further utilized, such as WBZ-TV's cooperation with the State Department of Education in producing and broadcasting a television series on English as a second language.

For a more detailed discussion of the current resources and potential uses of educational technology, see pp. II-495-520 of Volume II, the Technical Report.

IV.A.8. Transfer Policies

In general, a student may transfer from full-time status to continuing education or part-time status within the same institution if he has passing grades. Some institutions such as Boston College will only accept "C" grades or better and some such as Springfield Technical have a ten-year time limit. A few such as Babson and Clark enforce a credit limit.

The policies are more strict for a student transferring from one institution to another, whether or not there are changes in his status. A "C" grade is usually required, with certain exceptions like the Northeastern graduate schools which require a "B". Time limits on acceptance usually range from 6 to 10 years although Assumption College, for example, has no time limit. There is much variation in number of credits accepted in transfer - anywhere from "no limit if courses are consistent" to as few as 12 credits.

An issue is whether students enrolled in continuing education programs can take regular full-time courses for transfer credit, and if so, under what circumstances. School policies differ significantly on this. Some allow continuing education students to take courses in the regular full-time program for credit or noncredit, others for credit only or for noncredit only. Several will allow only matriculated continuing education students to take courses in the regular full-time program. Others require that the continuing education student follow formal admission procedures into the full-time program in order to take the courses. Still others will not allow a continuing education student to take courses in the regular full-time program at all. There is no general pattern of accessibility of continuing education students to regular full-time courses.

Throughout the state, mechanisms exist enabling students to receive credit for life experiences. Understandably these options are more readily available to continuing education students than to part-time students in regular full-time programs.

Most colleges and universities in Massachusetts offer some method of credit by examination for matriculated undergraduate continuing education students and part-time students in full-time programs. Although some schools have designed "challenge" examinations of their own, most will accept CLEP scores in the upper 50th percentile for credit. Most do not require a fee for credit by examination, and generally, 20 to 60 credits are available. As with credit for experience mechanisms, there is not much publicity of opportunities for credit by examination.

For a more detailed discussion and inventory of transfer policies and credit options, see pp. II-389-420 of Volume II, the Technical Report.

IV.B.1. Administration and Management of Continuing and Part-time Postsecondary Education

Data Formats and interviews were used to obtain information on administration and management. However, much information is either not regularly collected and recorded by institutions or segments or not comfortably reported. The fact, however, that there was a significant amount of data provided indicates that facts and figures can be assembled in situations where an institution is committed to doing so. The annual Financial Reports and Enrollment Data for State college continuing education compiled for the Board of Trustees of State Colleges illustrates that data collection and analysis are achieved when governing boards and central staff decide that it should be done.

Beyond problems of confidentiality of data and reluctance to report it is the further problem of diversity of administrative models. The variations occur along dimensions of status of the continuing education programs, powers of its administrative head, administrative and policy approval procedures. The powers and role of academic deans in day colleges are fairly uniform across all institutions. The term Director of Continuing Education has much more varied and institution-specific meanings.

Deans and Directors

Ninety-four institutions were surveyed for information about the management of their continuing education programs and the place they hold in the administrative organization of the institution. Of the 73 institutions which report a continuing education program of some kind, ten are administered on a part-time basis by staff or faculty with other duties (e.g., registrar, academic dean, program advisor, coordinator). Of the remaining 63 institutions, there are 43 directors and 20 deans. The directors are evenly divided between publics and privates. Seven of the deans are at public institutions, 13 at private institutions.

Two interesting phenomena may be observed on the basis of this data. First, private colleges and universities maintain and support not only the largest continuing education operations, but accord them "school" or "college" status within the university structure. By contrast, in most of the public institutions, programs are run by a director rather than a dean and are often subsumed under a larger administrative segment of the institution.

Second, whether an institution is public or private, its table of organization suggests that a dean carries greater responsibilities for program, faculty, policy and budget matters than most directors do. (There are exceptions to that rule at both public [e.g., Middlesex Community College] and private [e.g., Bentley College] institutions.) Continuing education programs headed by a dean rather than a director are afforded greater prestige and importance within the institution and function more effectively as a result. This often means reporting directly to the president, control over courses and programs, and competitive leverage at budget time. Directors, however, are often excluded from the real policy-making councils of the institution, which may thwart rather than enhance the sound management of the very programs they must supervise and administer. Directors usually report to an academic dean or his assistant and committees, and have very little control over budgetary matters.

The Continuing Education/Part-time Mix

Strategies of administering the two kinds of programs vary dramatically with the size and nature of the institution. Some private institutions with national educational missions stressing traditional academic learning and research in many instances do not have a school or division of continuing education and report that part-time study rarely occurs at the undergraduate level. In such institutions some of the noncredit functions of continuing education are carried out by offices of community service, special programs, and adult education.

Large private institutions which do have continuing education programs and encourage part-time study as well, administer continuing education through a separate school or college headed by a dean, and use this mechanism for focusing outreach functions. Examples are Metropolitan College at Boston University and University College at Northeastern University. Northeastern is unique in having its university-wide continuing education and part-time undergraduate study coordinated by a dean as well as a focus of efforts in a college. The relative importance of continuing education to the educational mission of these large private institutions is related to their corresponding policies of encouraging and supporting part-time studies, and vice versa.

Smaller private institutions, whether liberal arts or specialized in nature, regard part-time and continuing study in ways as varied as is conceivable. Some institutions (Western New England College, Suffolk University, Springfield College and Worcester Junior College are examples) treat part-time and continuing study as an activity of equal importance to day programs. In other institutions, educational programs beyond full-time regular ("day") study are sometimes coordinated by the same office; e.g., evening and summer courses are handled much like graduate work, extension, and part-time study.

Increasingly, however, small private colleges sense the educational and financial possibilities in continuing education, and accord programs appropriate importance. A discernible trend is the appointment of a full-time dean or director reporting directly to the president, with development and management responsibilities such as extending the day program into the evening, offering courses off campus at the convenience of the students, and a variety of nontraditional formats with appeal to persons not previously served.

The relation between continuing and part-time education and the regular day programs at public institutions is even more closely related to the type of institutions than it is among the privates, although there are anomalies. The University of Massachusetts is a good case in point. Its Amherst campus has a range of continuing education programs as well as a positive policy for part-time study options.

The Boston campus, on the other hand, does not have a continuing education program per se by intent. Rather University of Massachusetts - Boston's policy is to increasingly operate on an extended day and enroll more part-time students in its regular full-time program.

The State College System and Regional Community Colleges offer somewhat more consistent pictures because the degree of segmental control over continuing education is higher. Local conditions are less the determining factors as to whether continuing and part-time studies may or may not exist. Even where local conditions presently are conclusive, in the long run segmental and area coordination may lessen their impact. Two examples are cases in point. Lowell State College has part-time enrollments but no continuing education program. Lowell Technological Institute has both a Division of Evening Studies and a Division of Continuing Education which, in effect, coordinate part-time study. Some rationalization of these different institutional policies will no doubt come if the proposed merger of these two schools takes place.

Status of the Faculty

College administrations and faculties generally regard the continuing education program as ancillary to the regular "day" program, more so when the program is small, less so for large programs having college status within a university. Regular full-time faculty regard extension courses as regular departmental courses meeting at night; hence, the curriculum and instruction of extension programs are a function of the academic departments and their inclinations and abilities to offer night courses. This traditional attitude is still dominant and constitutes a serious problem for continuing education administrators wanting to offer options to day programs. Faculty members usually regard "teaching a night course" primarily as a moonlighting activity for extra salary. Once the academic dean and the departmental chairman have determined the courses to be taught on the basis of probable demand, the chairman matches the class to be taught with the instructor eager to teach an extra class (or "deserving" of the financial opportunity).

For curricular, instructional, and staff reasons, continuing education directors are moving away from these traditional patterns and, whenever feasible, recruiting part-time instructors to staff liberal arts courses. Internal pressures against this trend are enormous, however, because of the current "bear" market for conventionally trained college faculty and because faculty want to protect their moonlighting income supplement opportunities. Continuing education directors report more positive results in recruiting part-timers to teach occupational and career courses. They also report a greater commitment to teaching and a higher student responsiveness to nonacademic faculty and adjunct faculty (qualified persons from the professions, government, business, and industry who teach courses or fill a special advisory capacity within a particular continuing education program).

While notable success has been achieved with adjunct faculty in programs as diverse as Northeastern University's University College to the off campus Raytheon/Fitchburg State College program, day college faculties tend to strongly resist such "invasions of their turf." For example, in many institutions day college faculty have first choice of any continuing education teaching opportunities, even to the extent that such a provision is written into the faculty union contract at some public campuses.

Nontraditional Studies

One of the current problems of academic administration is starting nontraditional studies. Should it be done within the existing academic departments, within multidisciplinary units of the institution, or within the continuing education division? There are many examples of the three options in Massachusetts, each with its own advantages, disadvantages, strengths and weaknesses. By and large, nontraditional study projects and programs -- as options to the regular academic fare -- are to be found among regular academic departmental offerings (perhaps coordinated or supervised by a dean or director if they are inter-departmental) or as special programs reporting directly to the chief academic officer or president. "Open College" pilot programs at Salem and Bridgewater are of this type. The other two "open colleges," those at Fitchburg and Framingham, are administered through the Continuing Education Divisions which permits not only a greater flexibility in determining program content but in enrolling heterogeneous clienteles, recruiting adjunct faculty, operating off-campus sites, and obtaining special funding.

Because of this greater apparent capability to innovate, most of the State institutions' external degrees are administered by the Divisions of Continuing Education (DCE's). The reasons for many continuing education programs' progressive administration and management characteristics may be their entrepreneurial role *vis a vis* the institution and the surrounding community. Their relatively conservative stance on program content and experiential learning may stem from a historical background of "extension education" which was both highly structured and academically conventional.

Common Administrative and Management Problems

Financing and pricing issues are discussed in IV.B.2. It is sufficient here to note that costs and charges -- market factors -- are the first considerations necessary to beginning, evaluating, or terminating a course or program in continuing education. Accessibility and quality are decidedly second and third in order of importance. Program "accessibility" includes such issues as course content, site selection, and scheduling, special admissions arrangements, tuition prices, remedial and counseling services, and special credit arrangements.

A recent study of community college continuing education administrators reports some preliminary findings of the directors' concerns.[12] These concerns, by priority rankings, are (1) "staying in the black" with a particular course or program; (2) continuing education clients should get more recognition and acceptance as college students; (3) state and federal funding is necessary to underwrite some of the costs of continuing education to students and the institutions; e.g., tuition should be on a parity with regular tuition, and continuing education students should be eligible for the same services as regular students; directors do not wish "full funding" like day public college programs lest they lose some of their autonomy and flexibility; and (4) continuing education divisions should be able to give people what they need when they want it at a cost they can afford. Spin-offs from these concerns, the directors' day-to-day worries as entrepreneurial managers, are such questions as: what is the minimum class size?, under what circumstances can a course be run at a loss?, in what sense is a course undertaken as an "investment"?, when may a course be used to pay for other courses?

IV.B.2. Discussion of Financing, Pricing and Scholarships

The Problem of Obtaining Information on the Financial Structures of Continuing Education Programs

During this study it was clear that institutional and continuing education administrators and presidents of institutions regarded finances as the most sensitive aspects of their programs, and were reluctant to disclose, as a rule, the basic data necessary to compile a complete and accurate profile of revenues and costs. This was true of institutions both public and private, large and small, rural and urban. There are several reasons for the importance attached to financial data, and the consequent reluctance to disclose them with any reasonable degree of accuracy and specificity.

First, continuing education operations in both public and private institutions are self-supporting (on an operating basis), dependent upon direct support from tuition and fees paid by continuing education students and from whatever grant or contract funds special programs generate. They seldom receive operating funds from the parent institution. Legislation prohibits the use of State funds for the support of continuing education activities in the public institutions. Program income, expenditures, or profits and losses thus provide a clear index of administrative viability and some indication of educative value. These variables also provide information on the link between consumer demands and incentives insitutions have to respond to. Colleges and universities thus tend to be closely guarded about the financing of their continuing education programs.

Second, rivalry among the existing continuing education programs in a given area can create competitive pricing (in tuition charges) when marketing similar programs to essentially the same clientele. As in any competitive market situation, continuing education program administrators are reluctant to make particular cost factors common knowledge.

Third, there is a difference between the real costs and the perceived costs of continuing education. Regardless of the real costs of sustaining a continuing education program (discussed in detail later in this section), which include indirect as well as direct expenditures for operations, most colleges and universities regard continuing education as a supplementary activity using available buildings. Hence income derived from this source is "surplus" with which to meet other outstanding needs of the institution. Priorities are seldom set concerning either how much of continuing education's net income should be transferred to the institutional accounts or on what the institution ought to spend it. Advance planning and budgeting, therefore, are not usually a central part of the managerial style of continuing education divisions. Rather an approach of "offering many courses and then conducting only those which generate a surplus over direct costs" is typical. (In a few of the larger private institutions the process is more tightly managed than the above general comments imply.)

Fourth, cost accounting and financial management practices in continuing education are so diverse that even the elements of direct cash cost are not the same across programs (e.g., telephone may be regarded as either direct or indirect cost, as may be the salary of the continuing education director). What is treated as direct or indirect depends on the particular institution. Further, while surpluses are used to help support day program operations (in both public and private institutions) the indirect subsidy received by the continuing education operation (e.g., free campus classroom space) is rarely even exercised. Hence the words "income," "surplus," "cost" have different definitions at different institutions.

Fifth, while one might expect financial structure, pricing and scholarship aid to be tied in to each other in some rational policy, they are not and typically are determined independently.

Sixth, presidents of private institutions are reluctant to reveal insitutional financial data to a State funded study in such a time of severe public-private competition as now. Presidents of public institutions prefer to maintain a low profile on this source of discretionary funds (surplus) and faculty salary supplement (moonlighting) they have.

While there is no substitute for the kinds of budget figures requested and which institutions did not provide, some hard data was obtained where Data Formats were completed. In addition, many directors were especially helpful in discussing confidential information by letter, telephone, and in interviews. Such confidential information has been helpful to this Study and is reflected in the general insights and recommendations, but is not described or revealed herein.

Varied Financial Structures of Continuing Education Across the State

Among the private institutions there is less variation than among the public institutions. In all cases, the continuing education function is (big or small) a form of both "community service" and "living endowment" It is usually set up both to meet community needs and to generate income needed to meet the college's overall financial needs.

In the public institutions, the pattern is varied. There are four models which have developed under the legislative provisions that the public institutions may conduct continuing education programs "at no cost to the Commonwealth". These are the trust fund approach, the revolving fund approach, the spending limit approach, and the extended-day funded approach. The "at no cost to the Commonwealth" phrase refers to the fact that day programs are funded each year by the State through funding faculty positions, buildings, etc., based on the number of students each institution plans to enroll.

At U./Mass-Amherst, the Division of Continuing Education has been established as a trust fund operation, giving the Division nearly complete control over its funds. This discretion, plus the higher fees charged by U./Mass compared to other public institutions, enables the Division to expend more money on staff and operate in a more entrepreneurial fashion, since the income-expenditure process does not involve the State, but instead a local bank (subject to State audit).

The Community College system employs the State revolving fund account approach which retains most of the discretion of a trust fund, but restricts the accumulation of funds, and does involve the State directly in the income-expenditure process.

The State College System continuing education programs are structured on the spending limit model. In this mode, the legislature authorizes a spending limit on the continuing education account. State funds may be expended up to that limit to conduct continuing education, but all revenues must go back to the State and revenues must exceed the amount spent. The State Colleges also have a procedure whereby 10% of continuing education receipts are allocated to the State College system central office to be expended for three purposes: part for a "bail-out" fund to assist small or new programs operating below break-even; part as a fund to perform research and fund projects in continuing education; part as a fund to support staff work for the Board of Trustees.

At U./Mass-Boston and at Lowell State College, no programs formally called "continuing education" are conducted. Rather, both schools have chosen to operate "funded part-time study", equivalent to continuing education in other public institutions, by means of operating on an extended day principle (regular budget day classes are opened to part-time students and offered at some hours more convenient to part-time students). In both cases the part-time study opportunities are totally under the control of the regular day college administration and faculty. Hence the flexibility and responsiveness of a separate continuing education division is sacrificed for the ability to have part-time study funded by the State.

Implications of Self-Support and Subordinated Administration at the Institutional Level

The previously noted study of continuing education administrators in community colleges analyzes the problem of continuing educations's "self-support" in relation to the other administrative demands of "quality" and "accessibility." While the study covers only the Community College segment of continuing education and the analysis is incomplete, the 13 (as of 1972-73) Regional Community Colleges constitute a representative financial picture of the continuing education alternative system as a whole and for most institutions except the major, large private university programs.

"Self-support" to a continuing education director means whether a course or a program "pays for itself." Although directors have some idea of the size of receipts taken in over a fiscal or academic year and a general idea about the number of courses and size of enrollments required to break even, stay in the black, or bring in a surplus, rarely do formal budgets exist. Typically directors are not fiscal agents, fiscal control being vested in the college budget officer or other administrative staff. Because budgets do not exist, in the fiscal sense it is not possible for continuing education administrators to track income and expenditures in any accountable way.

One half the directors surveyed have no control whatever over their own financial resources. They know that most of their revenues come through tuitions, fees, and contract courses, with 15% or less from Federal and State funds for special programs (such as the police science programs). They do not know, however, what surpluses or deficits they incur, or how suprlus funds are used.

The other 50% of the directors are able to report breakdowns of the use of continuing education revenues including such items as administrative services such as student records, testing services, faculty records, etc. From these expenditures, the remaining surplus revenues may be allocated to the regular day programs in a variety of proportions, for a minimum of 10-35% of the surplus to all of it. An average figure is roughly 20% of the gross income ending up as surplus alloted to the day program. Expenditures of these funds are varied and reflect particular needs at a given time rather than a consistent plan.

On the other hand, colleges provide on-campus office and classroom space and a variety of equipment without charge. Although continuing education directors do not analyze the cash value of such indirect subsidies they receive, these indirect costs to the college of supporting the divisions of continuing education outweigh the appropriated surpluses generated by the evening programs, particularly in the public institutions.

The indirect subsidy has two components: One is the cash component -- cash cost incurred by the day college as a result of evening division operation (e.g., heat, light, maintenance, etc.). Second is the equivalent value of facilities and services provided, if those facilities had to be rented by an independent coninuing education division (e.g., free classroom use). It is this "opportunity cost" or "equivalent value cost" which must be reasonably calculated and added to the indirect cash costs mentioned above if the total indirect subsidy received by the continuing education division is to be determined.

In the case of the public institutions, the continuing education programs receive an indirect subsidy from the State in the form of free space, free support services, etc. Sometimes the subsidy is direct, as in the form of some continuing education administrative personnel salaries paid out of day faculty slots. Recently the Massachusetts Legislature has been the prime force attempting to rationalize the financial structure by requiring in some institutions (yet not all) cash payments from the continuing education divisions for indirect subsidies received, and putting an end to use of day faculty slots to carry continuing education personnel.

In the case of the private institutions, the continuing education divisions amount to a "living endowment." The divisions generate a surplus which is usually crucial to balancing the budget of the institution as a whole. Here, too, the continuing education division is not managed on a true total cost basis as a truly self-supporting unit. Again the indirect subsidies received by the program from the parent institution are not identified, much less quantified.

Institutional Costs of Continuing Education Programs

From the perspective of the report -- namely that part-time and continuing adult postsecondary education should be of equal stature and value as the traditional youth-day-model -- imprecise administrative and financial practices are intolerable. One basis for cost analysis leading to greater precision is the approach to uniform "total-cost" accounting and budgeting outlined below.

Specifically, given the fact that the inputs to a typical continuing education program are the same (space, faculty, advertising, etc.) regardless of institution (public or private), that the true costs for these inputs are roughly the same for everyone, and that the basic production process (educational production function) used by all institutions is roughly the same, it is safe to assume that the true total costs or "real costs" are the same for all programs with minor variations. The apparent difference in financial structures and costs between programs is largely an artifact of the different accounting and financial management philosophies and practices employed and the components of direct and indirect (explicit and implicit) subsidy received. The difference is one of cash costs of a defined administrative unit vs. true, total costs of the operation.

The elements of true total cost are listed below:

OUTLINE FOR ANALYZING FINANCIAL STRUCTURE OF AN INSTITUTION'S CONTINUING EDUCATION PROGRAM

Ture Components of Cost for Continuing Education	Assessed Fair True (Market) Value or Cost	Optional Source of Coverage of the True Costs		
		Actual Cash Expenditures in Continuing Education from Continuing Education "Budgeted" Expenses	Expenditures on Continuing Education from the Continuing Education "Budget Surplus"	"Expenditures on Continuing Education from Indirect Subsidy Received from Parent Institutions
Personnel Services	A	A_1	A_2	A_3
Commodations	B	B_1	B_2	B_3
Operational Travel	C	C_1	C_2	C_3
Contracted Services	D	D_1	D_2	D_3
Institutional Support Svs.	E	E_1	E_2	E_3
Equipment	F	F_1	F_2	F_3
Miscellaneous	G	G_1	G_2	G_3

For each letter then $A = A_1 + A_2 + A_3$ must obtain, as must the equation:

$$\begin{bmatrix}\text{Total}\\ \text{True}\\ \text{Cost}\end{bmatrix} = \begin{bmatrix}\text{Total cash}\\ \text{expenditures in}\\ \text{continuing education}\\ \text{from continuing}\\ \text{education}\\ \text{"budgeted expenses"}\end{bmatrix} + \begin{bmatrix}\text{Total}\\ \text{expenditures on}\\ \text{continuing}\\ \text{education from}\\ \text{the continuing}\\ \text{education "budget}\\ \text{surplus"}\end{bmatrix} + \begin{bmatrix}\text{Total}\\ \text{"expenditures"}\\ \text{on continuing}\\ \text{education from}\\ \text{indirect}\\ \text{subsidy received}\\ \text{from parent}\\ \text{institution}\end{bmatrix}$$

or, $TTC = TCE + TES + TEIS.$

The operational cost at each instituion, therefore depends on what the figures A , A , and A are in each case and on which are cash costs and which are indirect subsidy. The problem with present financial management patterns is that the equation which usually is used is:

$$\text{Partial (visible) Cost} = TEC + TES$$

wherein the dollar value of the indirect subsidy is ignored. The implications are considerable and are discussed in the Finance recommendations of this report.

A survey of continuing education directors corroborated the preliminary findings of the Kendrick administration study noted earlier. In many cases the respondent to the inquiry was not the director of continuing education but a staff member from the president's or budget office. Budgets generally do not exist for the continuing education programs. As one reply from a president's office put it : "We do not run continuing education on a planned budget system. Our expenses are governed by the success of the operation."

Reporting institutions listed by line item all expenditures paid out in that category, whether in direct support of continuing education or not. The resulting profile of cash expenditures indicates an average of 81% spent for faculty salaries, 7% for administrative personnel, 3% on commodities, 2.6% on support services, 2.6% on promotion, 2.2% on equipment, and 1.6% on off-campus rentals within the continuing education program. These percentages parallel those reported segmentally for the State college system in 1970-71. By cross-checking other known or reported facts about a specific program, it was possible to extrapolate from the expenditures to percentage amounts of the allocated surplus paid into college accounts for regular college use. In many cases, non-continuing education administrators and clerical staff are paid wholly or in part from these revenues on the grounds that they contribute to continuing education. Similarly, continuing education expenses and personnel are sometime paid our of day budgets. It is important to note that some colleges which appear to generate a "surplus" on continuing education operations which is then paid to the day school may not show a surplus at all if all direct continuing education personnel and expenses were paid out of continuing education revenues. Hence, until a uniform true total cost approach to costing continuing education direct and indirect expenses is developed and applied, apparent "surpluses" bear no relation to the value of the direct and indirect subsidy received.

Continuing education revenues cover many expenditures which may or may not be directly associated with those programs. On the other hand, the college is not reimbursed for many large indirect costs. These include on-campus rents, utilities, custodial, building ammortizations, faculty and staff benefits, support services (library, media, gymnasium security), and like indirect costs. Depending on the institution and the size of the continuing education program, these overhead costs average a minimum of 20% to 40% of the program's annual gross revenue. Thus, the true total cost (as defined earlier) of a program is approximately 1.3 times its gross revenues in public institutions.

The size in direct or hiiden subsidy in each case is therefore approximately one-third the program's gross revenues. Thus, true total cost budgeting would require revenues one-third higher, with the additional revenues paid to the State as "overhead" by the continuing education divisions. In the recommendations section of this report, the logic behind raising tuittion substantially to permit true self-supporting operations (on a total cost basis) is developed to permit coverage of all indirect costs and to provide badly needed funds for counseling and supportive services on each campus.

Pricing and Scholarships

Comparisons of tuition charges by full-time, part-time and continuing education categories, by regions and public-private institutions, are interesting because they show large pricing variables across the State. These differences exist in part because of the public/private breakdown and the indirect subsidy received at public institutions (continuing education programs are in many ways a function of the regular program and are priced accordingly), in part because these programs charing low (below $20 per credit hour) or high (about $30 per credit hour) are really not competitive and are offering a product so unique that the existing clientele is identified, recruited, and "sold" at that level. Even more singicicant reasons than these explain why pricing varied the way it does.

Private institutions are more directly responsive to market demands than the publics. Depending upon costs, they may- and do-raise or lower prices at will. The pricing policies of public institutions are set by Statewide boards and reflect a variety of considerations, among which are: historic concern of State institutions to keep tuitions low on the assumption that cheap prices will benefit more people; recent trends in raising tuition and fees to meet rising costs; last year's prices which act as a base albeit a fairly arbitrary one; and the gradual appearance of modest State and Federal assistance plans based on financial needs, which are open to half-time (but not less) students.

Fees -- an additional and highly lucrative source of revenues for the programs -- are more numerously and flexibly administered by the division of continuing education than tuitions. In many cases they represent hidden costs to the student clientele and can easily double his cost of of education. Institutions, both public and private, could do a much better job than they do in publishing full and complete pricing information for prospective clienteles. This does not constitute an argument against a flexible fees policy. Indeed, flexible fees to cover variable costs offer an example of flexible pricing and programs, representing a closer approximation of operational costs, than does a flat per-credit-hour tuition charge.

The existing State voucher plans which provide aid to selected groups (veterans and teachers) are discussed in the Finance recommendations section. They are the only State aid presently to part-time students. As will be described later, they are not true cash aid plans.

IV.B.3. Cooperation and Coordination in the System

There are a variety of forms of cooperation among academic institutions and other organizations in programs of continuing and part-time education. The relationships between individual institutions, and such diverse community organizations as businesses, government agencies, *ad hoc* citizens groups, and other organizations comprise the most significant elements of cooperation. The least common form of cooperation is among institutions involved in continuing education.

In general, current forms of cooperation in continuing education serve the purposes of reaching out to special clientele groups, both disadvantaged groups and professional or other special interest groups. Cooperation has not yet been utilized as a means to sharing of resources among academic institutions and to avoidance of duplication among programs.

There are several formal and informal consortia operating in the State, the most significant of which are the Worcester Consortium for Higher Education, the Cooperating Colleges of Greater Springfield, the Five College Cooperative Program (centered in the Amherst area), and the Southeastern Association for Cooperation in Higher Education in Massachusetts. While some of these institutions actively cooperate in joint projects, course exchange, and the like, few of these activities involve the continuing education divisions. Cross-registration is as yet of little value to evening students who take only one or two courses each term. Likewise, facilities sharing, except in the case of complex technical equipment, benefits the part-time, nonresident student to a lesser degree than his full-time counterpart.

However, various cooperative ventures other than consortia have been undertaken in Massachusetts and do affect the continuing education or part-time student. One example is the associate corrections program operated by Holyoke and Berkshire Community Colleges to train correction personnel. Middlesex Community College and Boston State are planning to jointly offer education courses at the former's extension center in Arlington.

Much more prevalent in Massachusetts than interinstitutional cooperation is cooperation between an institution and an element of the community. Many continuing education programs, especially those at public institutions, have a contract with a business, government agency, or community group to provide specific courses, whether on-site or at the college. These range from large satellite operations at military installations to a single class aimed at training employees of a local small business. Many schools cooperate with local hospitals to provide general education courses for nursing students. Others provide skill training for a local agency concerned with aiding the disadvantaged.

The major determinants of such activities seem to be two: 1) the commitment of an institution to provide its educational resources to groups in the community it serves which require such assistance; and 2) an assurance--through government grant or promise of a paying clientele--that the financial costs of the undertaking will be met. While it may be true that some institutions engage in such efforts without expecting to break even financially, the majority of these programs appear to entail an outside source of funding. Continuing education deans and directors, many of whom display a real commitment to the needs of the community, often seek out such relationships, to the benefit of both the institution and the community they serve.

For detailed characteristics of cooperative efforts with other institutions and with agencies or organizations, see pp. II-373-385 of Volume II, the Technical Report. For discussions and listings of cooperative efforts of periphery institutions, see pp. II-589-595 of Volume II, the Technical Report.

V. USERS: THE CURRENT STUDENT CLIENTELE OF CONTINUING EDUCATION IN MASSACHUSETTS

V.A. Characteristics of Students in Continuing Education and in Periphery Institutions

A survey of continuing education students was conducted to determine the current clientele of continuing education programs as defined by this study (p. 2). The survey included public and private degree-granting institutions. The goals were to determine 1) personal and family information -- what kinds of people are currently participating; 2) program and course information -- what student needs are now being met; 3) motivational information -- for what reasons are students enrolled; 4) reactions to possible changes in program offerings -- what demand exists for new programs or changes in delivery? About 6,000 students or 7% of the total continuing education population were sampled and responded to 74 questions in these areas.

In general, the current student clientele is young, affluent, upwardly mobile from their parents' level of education and jobs, and already employed in professional or managerial jobs. Two-thirds of students are men, one-third women. The primary reason for enrolling in continuing education is job advancement.

This general profile is surprising in light of the general view that continuing education provides a form of "second chance" for those who did not have the resources to attend college at age 18-21. In fact, the current student clientele is middle class in nature. Most are already earning moderate to high incomes at 25-35 years of age and are destined to be earning even higher incomes by age 50-55 (the peak of a typical age-earnings curve). The group is highly internally motivated, and they already have some college or even graduate education.

The current continuing education system does not include large numbers of disadvantaged or other minority groups. Although percentages of Blacks and Spanish-Americans are included in programs equivalent to their percentage in the population, more should be represented given their low educational background relative to Whites. Women are only one-third of the total student population, and many of these women are teachers taking extra education courses. Disadvantaged or welfare mothers, and women returning to careers after child-rearing are not adequately represented in the current student population. It would appear that greater measures of outreach and financial aid would be necessary to attract these groups to continuing education.

The current student clientele does not vary significantly between public institutions and private institutions. Although public institutions charge lower tuition per course than private institutions, it appears that the distribution of incomes and occupations is the same for students in both. Cost does not appear to be a significant factor in the decision to attend for those currently enrolled. Apparently the cost per course ($50-$150) is low enough relative to income not to be a significant barrier to attendance. In addition, many students are reimbursed by veterans or teachers vouchers or by employers. However, the cost differential between public and private institutions is undoubtedly of some effect on the choice of schools. It is also likely that cost is a barrier to lower income individuals not currently represented in programs.

Men in Continuing Education

The typical male student is young (51% are between 25 and 35), white and native-born, married and likely to have children. Although 82% of these men have attended a school beyond high school, only 59% have received a degree higher than the high school diploma. 22% have attended graduate or professional school, but only 8% have a graduate degree.

Male students are upwardly mobile: only 25% of their fathers and 18% of their mothers went beyond high school. 33% of their fathers were professionals or managers, while 62% of these men are already in professional or managerial positions. These men are holding down full-time jobs (86%) or looking for work (2%). They are already holding responsible positions. 62% of those working are professionals or managers. 11% are protective service workers (firemen or policemen). They are already receiving good incomes; 53% are earning over $10,000 a year and 62% are in families of combined incomes over $10,000. The male students who are married have wives who are less educated than they (51% went beyond high school). Their wives generally do not work (55%) and if they do work it may not be full-time (42% work less than full-time).

Women in Continuing Education

The typical female student is also young; a surprising 39% are under 25. But, a higher percentage of women than men are over 35 (27% of women compared to 22% of men). Women students are more likely than men students to be single (46% are single) and less likely to have children. The educational background of women is similar to that of men; 25% have already received some graduate or professional training but only 11% have as yet received a degree.

Women students, in general, grew up in families of higher socio-economic background than men students: 35% of their fathers and 30% of their mothers went to school beyond high school. 40% of their fathers were professionals or managers.Their mothers were also likely to have worked (18% as professionals). Women students are less likely than men to be working, but a high percentage do -- 70% are working or looking for work. Of those that work a higher percentage than men hold less than full-time jobs (29%). Of those working, 51% are professionals and 31% have clerical jobs; 55% work in professional services (schools, hospitals, community organizations). However, only 14% are personally earning over $10,000. When their husbands' income is considered, however, married women come from high income families. 50% live in families with incomes over $10,000. Their husbands hold jobs as professionals or managers (63%).

Participation in Continuing Education

Men students are heavily concentrated in business (23%) and professional (27%) subjects and regular academic (25%) subjects. Women are more concentrated in social or community service (28%) and regular academic (42%) subjects than men. Women also dominate the subjects of arts and crafts, family, personal and cultural interest, while men dominate trade, industrial and technical subjects.

85% of the students are enrolled in the continuing education division; 13% of the students in these continuing education courses are full-time day students at that institution.

Most students are taking these courses for credit; about 5% of the courses were noncredit, and only 6% were taking any of these courses on a noncredit basis.

Men are taking more courses on the average (2.3 courses) than women (1.8 courses).

Most students (90%) got to class via private auto. Public transportation was little used (6% via bus or subway).

About 18% reporting were taking the class in a branch campus.

Students live, on the average, fourteen miles away from class; and take about twenty-five minutes getting home from class.

Motivations for Enrollment

Continuing education students are highly motivated by job and career advancement: 83% of men and 70% of women state as their main reason for participation to improve or advance in a job or to get a new job. Men expect to advance in their current firm while women more than men also think of getting a new job: only 9% are in continuing education for general information, the remaining for three other categories of social or personal interests.

Although most sudents are taking courses for credit, they are not necessarily degree candidates. Men are more likely than women to be degree candidates (88% vs. 77%). 30% are studying for a graduate or professional degree.

Motivation for job advancement is internal: 67% of men feel the program necessary for their own job advancement, while only 12% report that their employer requires it or that the program is necessary to take a licensing exam. 58% of men taking courses for job advancement are upgrading current job skills while 42% are retraining in a new area of skills. An even higher percentage of women are in a new area of skills (48%).

Expectations of job advancement are high: about 75% of those hoping to get a new job expect to work as professionals or managers (compared to 60% working now in those job categories). 25% expect to receive a yearly salary increase of over $2,000.

Students had previously dropped their schooling (90%) for a variety of reasons: lack of finances (23%), marriage (6% for men and 25% for women), to serve in armed forces (16% of men), and other personal reasons, but not because of a poor record (only 6%).

Most students found out about the continuing education program through their own initiative or from friends or family. 17% of men found out about the program at work (10% of women) while only 10% of men and 15% of women heard of the program through public communication services -- newspapers or brochures.

Students are in continuing education mainly because of the convenience of hours (72%). Their choice of one particular school over others has to do with closeness to home or office (34%), low cost (20%) and that this school may be the only institution offering the program in the area (22%). Quality considerations are minimal (11%).

Students seem to be paying on the average about $80 per course. 59% of men and 24% of women report that they are being reimbursed either in part or in full for this course. 36% of those being reimbursed are on a veteran's subsidy, 54% receive an employer subsidy -- 14% from a government employer and 40% from a private employer. Of women receiving s subsidy (only 24% do), 54% receive a subsidy from a private employer, 10% have a teacher's voucher and 11% receive a subsidy from the school (vs. 2% of men).

Not surprisingly, women are more concerned with the fee for the course (44% considered the course fee when deciding to enroll vs. 34% of men). 61% of women and 45% of men say they would take more courses if they were cheaper.

However, of those being reimbursed, 71% of men and 78% of women state they would still take the course if they had to pay the entire cost themselves.

About 22% of students do not plan to take more courses next year; 30% of those not continuing will have completed degree requirements. Neither lack of veterans' or teachers' subsidy nor cost of courses is a problem (only 14%).

For simple frequency distributions of responses to the student questionnaire by men and women, and by students in public, private, community colleges, state colleges, and other programs, see pp. III-11-59 of Volume II, the Technical Report.

Student Clienteles in Periphery Institutions

Proprietary and Independent Institutions

There appear to be two types of clienteles in proprietary institutions. First are the students clearly enrolled for job-related reasons. They are taking courses in proprietaries for job skills, either beginning or refresher courses. In this category are many types of students: young high school graduates, dropouts, housewives, returning veterans. They are likely to be lower-middle and middle class in background. Some trade schools cater largely to men; other schools, such as business and cosmetology, cater to women.

A second but smaller group of students are those enrolled for recreational reasons. They are taking courses in art schools, cooking schools, language schools, and flight schools. These students are likely to be middle or upper-middle class in background.

Adult Education Programs

The suburban housewife is the typical student in adult education programs. She is enrolled for leisure-time, self-enrichment courses. She is middle-class and middle-aged. Many of the traditional courses in homemaking and crafts are geared to this group. Other students, including men, are enrolled to learn new work skills, and for leisure and hobby interests.

The Boston and Cambridge Centers for Adult Education attract the young, single, and professional group in the Boston metropolitan area.

Home Study Schools

Home study students are likely to be men interested in new job skills. They are generally upper lower to lower middle class in background.

For a school by school listing of student characteristics and their reasons for enrolling, see pp. II-602-609 of Volume II, the Technical Report.

V.B. Comparison of Continuing Education Students to Massachusetts Population

The student questionnaire results have provided information about the clientele of students currently in continuing education. When compared with the general Massachusetts population, it becomes clear that this group of students are a privileged segment of the population. Measured on income, occupation, or educational scales they are middle or upper middle class in status.

A direct comparison of the profile of continuing education students, male and female, with the Massachusetts population as developed in the 1970 U.S. Census in Massachusetts reveals the following:

--while 76% of male students and 69% of female students are in families with incomes over $10,000, only 41% of the families in Massachusetts have incomes over $10,000.

--while 62% of employed male students and 57% of employed female students are in professional or managerial positions, only 25% of employed males and 20% of employed females are in comparable jobs.

--while 3% of male students and 2% of female students have less education than a high school diploma, 37% of the Massachusetts population over 18 has less than a high school diploma.

These three measures of social status are interrelated and education is the key link. People who have attained high levels of education are qualified for good jobs. It has been seen that the major intent of continuing education students for taking courses is to improve their position in the economy.

The fact that continuing education serves individuals already high on social status scales means it is acting to widen the distribution of income within the State rather than provide opportunities for low income people or equalize it. Instead of serving to upgrade the employability of the disadvantaged and unskilled, it is increasing the already high potential of people in the middle and upper middle class. The income gaps among these groups grow as a result.

The exclusion of lower income, occupation and education groups from continuing education is partially due to a lack of interest on their part, partially to an inadequate response of the system to their needs.

Although continuing education is housed in the colleges and universities, the people to be served are not just those at the college level in their education. The expressed goal of the public education system is to serve those with even less than a high school diploma.

Continuing education is thus designed to be open and flexible in accepting people without the traditional "proper" credentials.

It is important that continuing education programs be more open to citizens regardless of educational background. Adult education should be designed to provide a "second chance" for those people past the college age who can benefit from programs. Many of these people left school for economic reasons at a time when access to education was limited or dropped-out from lack of interest. As they grow older and develop through experience, they are better suited to continuing education.

Other significant differences and parallels between the continuing education student population and Massachusetts' population are: Males are over-represented and females under-represented; 18 to 34 age groups are over-represented and those over 45, under-represented; racial and ethnic character are proportionately represented; single persons are over-represented and married persons, under-represented.

It is clear that continuing education is not currently serving large numbers of the middle-aged or elderly population. Only 9% of continuing education students are over 45, compared to 48% in the population at large. This is surprising in view of the obvious potential of programs to serve people considering a mid-career change or housewives returning to work.

For a detailed comparison of students and the general population across the State, in each of five regions, and in each of eight geographic service areas, see pp. III-65-72 of Volume II, the Technical Report.

V.C. Access, Guidance, and Outreach Programs and Policies

Outreach, admissions, and guidance policies are important determinants of the extent to which a school "reaches out" to serve its community. The nature of academic offerings sets limits on clientele reached. But an institution's admissions policies, its attempts beyond offering more courses and programs to attract students, and the services it provides to aid the student pursuing his or her studies are also significant measures of its community role.

Admissions

Admissions policies with regard to nonmatriculated students (those not formally enrolled in a degree program) are fairly standard: all who apply are allowed to take courses, so long as they have paid all required fees. This open admissions policy for class attendance (whether in credit or noncredit courses) is restricted at a few schools to courses which have space available after regular students have been admitted. In almost every case, formal application procedures are not required. Thus access to courses is not determined by individual admissions decisions of continuing education administrators. Poor academic background is no hindrance to participation. This is in marked contrast to full-time programs, where a case may be made that certain groups are denied access by virtue of strict admissions standards.

In general there are no limitations on student access from space or faculty requirements either. Continuing education programs are self-supporting; if enough students are willing to pay, the program will be offered.

The limitations to access must then be price and attitudes of certain groups that they either cannot attend or would not benefit from education if they did attend. The middle class character of students is not determined by admissions procedures but by participation rates of various groups. Outreach and guidance thus become particularly important in bringing in new clientele groups.

Policies vary when students seek to matriculate in a degree program. Some form of previous academic credential (usually a high school diploma or the equivalent) and the attainment of a minimum of successfully completed credit course work are often required. Part-time students applying for acceptance as matriculated candidates in full-time programs are subject to the same admissions standards as full-time students.

Guidance

Primary attention is this area has been paid to academic advising. Degree candidates structuring programs which best serve their purpose are usually advised by a member of either the faculty or staff of the institution. In some schools, only the dean or director of continuing education provides these services. Nonmatriculated students are often excluded from this counseling system, unless they specifically request aid. At a minimum, most schools have an advisor present during registration. For part-time students in full-time programs, almost no special counseling--academic or otherwise--is provided. Regular counseling facilities are generally open to use by part-time students, but they are often not equipped to meet the special needs and problems presented by part-time students.

Although some form of academic counseling is available to most part-time and continuing education students, almost no provision is made for personal and vocational guidance. Limited resources and funding place severe constraints on the provision of these services, particularly at public continuing education programs. Some schools have stretched these resources to provide more complete academic and personal guidance services. Middlesex Community College operates a center staffed by student-volunteers; Tufts and Pine Manor arrange peer group guidance support sessions for their continuing education students. Women at U./Mass.-Amherst operate the Everywoman's Center, which provides outreach and guidance services. Professional counselors are provided by some schools, such as North Shore Community College and Boston College Evening School, during hours when classes are in session. One of the few full-time counselors in continuing education is available at Massasoit Community College. Two of the State's largest continuing education programs--Northeastern and Boston Universities--also provide the most extensive counseling services. Special programs for part-time students at Worcester and Framingham State Colleges have built in a counseling and advising component to deal specifically with their needs.

Outreach

Almost every continuing education program tries to tailor its offerings to perceived community needs. Although few undertake formal need surveys, most schools maintain informal contacts with businesses, industries, community and civic organizations for input into program planning Schools often react to requests for programs from governmental agencies or local organizations, especially when funding or an assurance of adequate enrollment is given.

The few part-time-in-full-time programs have less flexibility in this regard, since the primary attention of these institutions is devoted to full-time students. But some special programs, particularly those with outside funding, are instituted by these schools.

In much the same way, branch campuses and satellite operations are utilized as a common method of reaching beyond institutional confines to unserved clienteles. These range in size from one course offered to a specific organization to large operations like Northeastern's suburban campus in Burlington, which offers a wide range of credit courses.

Special academic and personal interest programs are often established to attract community members into the educational processes of a college or university. Highly practical, short-term noncredit courses (like auto mechanics and organic gardening) and special degree programs like Framingham's external degree are indicative of this type of outreach. Both tend to remove barriers, either physical or psychological, that often deter participation in continuing education.

Recruitment efforts, through public relations, word-of-mouth, and personal contact with employer and community groups, are a common form of outreach. While some of these approaches, such as newspaper advertising, are not aimed at any specific groups, others are designed to recruit from specifically targeted populations. In general, few full-time programs attempt to recruit part-time students, except for those schools which have special part-time programs.

While the range of these efforts is broad, their number is limited by severe constraints of financing and staff. Without outside funding, many schools would not be able to provide significant outreach services.

The Education Periphery

The peripheral segment of post-secondary education in Massachusetts--proprietary and independent institutions and adult education centers--has a different prespective on the issue of outreach. For those schools designed to provide specialized job training preparatory to employment, the programs themselves are outreach efforts. Offerings are geared to associated business and industry needs, and vocational counseling and job placement comprise important components of these programs. Similarly, the adult education program, with its wide variety of courses to meet community needs and interests, is itself an outreach program of the local school system. Admissions requirements for these schools vary, but restrictions beyond age and presentation of a high school diploma are rare.

For more detailed discussion of outreach, admissions and guidance characteristics of programs, see pp. II-423-448 of Volume II, the Technical Report.

VI. RECOMMENDATIONS: GOALS FOR STATE POLICY AND MEANS FOR ACHIEVING THEM

Introduction

On the first two pages of this report a set of criteria on which choices among alternative public policies and administrative mechanisms should be made were presented. The recommendations which follow have been formulated and refined with these ten principles as a guide. The Alternative Postsecondary Education System should reflect these priorities of the public interest:

- --Consumer's point of view
- --Maximum diversity of options and designed to serve adult needs
- --Equal educational opportunity for all adults
- --State subsidies to students, not institutions
- --New mechanisms for counseling, guidance, access to information and assessment of proficiency
- --Maximum economy and best utilization of resources
- --Participation of core and periphery institutions
- --Cooperative efforts among institutions take precedence over single institution responses
- --Competition among institutions is desirable provided it is along certain dimensions
- --Utilization of existing resources in core and periphery institutions should be maximized and new capital expenditures minimized.

At issue then is what set of interrelated recommendations will move continuing postsecondary education in the Commonwealth most effectively in the direction of meeting these priorities.

The continuing postsecondary education system in Massachusetts has in the past grown without a clearly specified set of objectives. Institutional entrepreneurship has predominated rather than a conscious attempt to use resources most effectively to meet adult postsecondary education needs in the State.

Yet this unplanned growth in programs and institutions has provided the Commonwealth in 1973 with an asset of great value -- the basis of an alternative postsecondary education system which is geared to adult needs. The problem is not how to build a new system, but how to make what now exists operate in a manner more congruent with the priorities of the public interest specified above. The Commonwealth must develop a viable State policy which will preserve this asset from its built-in weaknesses (e.g., self-destructive competition) and enhance its positive qualities (e.g., flexible responsiveness free of many traditional academic constraints).

Efforts to alter the system or subsidize it should be specifically focused on rectifying those things the system is not doing well, while enhancing its positive characteristics as an alternative postsecondary education system based on an appropriately different model than full-time-day higher education and specifically designed to serve the different needs of an adult (not youth) clientele.

State policies should avoid the heavy hand of forced compliance and authority in favor of structuring a pattern of incentives such that institutions individually and collectively will make decisions and operate in a manner such that the overall system is efficient, responsive to changing needs, equalizes educational opportunity, etc.

Rather than a legislatively mandated approach to cooperation and coordination among institutions (a course which some other states have followed), the purpose and design of the recommendations in this report are to create a new pattern of incentives which taken together will foster rather than force institutional behavior consistent with broader public policy goals. The specific form of the recommendations for Service Area Planning Boards, for example, is based on that premise.

For all its positive virtues, the continuing education system as it now exists is not meeting some of the most important public interest priorities. It is not efficient, as there is much wasteful duplication. It is not balanced, since competition is regularly causing certain providers to cease operations (e.g. several proprietaries and some private colleges). It is not providing equal education opportunity, for low income, low previous education adults have markedly low participation rates in the current system. It is not as responsive and diverse as it might be. The characteristics of the system have been analyzed in detail in the Technical Report (Volume II) and summarized earlier in this report. Its strengths and weaknesses are evident from that data.

Examples of some evident problems of the system as it now exists are:

--that it has been the neglected child of American higher education and must now be brought into the mainstream

--that despite the fact that continuing education in Massachusetts embodies many of the attributes currently sought by the higher education reform movement, there is little recognition of this fact

--that despite the fact that adult continuing education enrollment is equal to one-half the total day college enrollment there are no State goals or policies based on clientele priorities and public expenditure decisions

--that continuing education is neither securely dependent or independent from the full-time day programs but in a middle ground with limited options and constraints

--that it has been subordinated to the full-time day program and faculty and administration

--that there is a failure to understand adult needs among the career professional full-time day faculty which influence and dominate curricular and staff decisions

--that the lack of price parity between public and private instituions (due to the indirect subsidy the publics receive) skews the competitive market in a manner such that some private institutions are being forced to terminate their programs

--that the system of incentives is such that it is more to any institution's advantage to increase its market share and force a competitor out of the market than it is to cooperate to maximize service.

--that declining private enrollments in the last few years have occurred as the growth in public enrollments has exceeded growth in total demand

--that despite a tuittion differential of two to three between public and private institutions, both serve essentially the same clienteles -- above average income, occupational status and previous education

--that there is very little cooperation or coordination among institutions, even neighboring institutions

--that despite the fact that there are a variety of types of institutions which serve adult needs (colleges, proprietary schools, adult education centers, employer-based programs, etc.) there is an absence of a design whereby the several providers may operate in a complementary fashion

--that despite considerable duplication of program offerings (especially in some cities) there are major gaps in fields of study and level of degree study open to adults

--that there is very little systematic analysis of need and design of programs to meet those identified needs

--that those most in need of additional education are not being served -- low income, occupational status and previous education

--that despite the common adult problem of accumulating postsecondary learning experiences at a variety of institutions, there is no external certifying agency which permits the amassing of such experiences into a degree

--that despite a heavy capital investment in broadcast and tape audio and video technology, there is very little use being made of that investment

In each section which follows an interrelated and mutually reinforcing set of recommendations are presented which, taken together, would facilitate a vital, innovative alternative postsecondary education system. It is appropriate that this report provide the data on which informed debate about public policy options can be based, and that it recommend a certain set of policies which reflect the authors' best judgments as to what is in the public interest. Such recommendations should provide the outlines of a public policy, but the exact form and details of the means to implement that policy are more properly the subject of debate in the executive and legislative policy process.

In the following sections recommendations are underlined in the text for emphasis. In each section there is a major recommendation and a series of more specific sub-recommendations in the context of explanatory text.

VI.A. Strengthening the Alternative Postsecondary Education System*

Major Recommendation:

The Commonwealth should recognize that: it has a valuable educational resource in the existing system of continuing and part-time postsecondary education; that this particular system's characteristics are more suited to adult population needs and more consistent with recommended contemporary educational reform than the traditional full-time-day-higher education system; and that therefore the autonomy and independence of continuing and part-time education should be strengthened so that it may be less subordinated to the regular day program on any campus and truly become an alternative postsecondary education system for adults.

Rationale and Sub-Recommendations

Part-time and continuing postsecondary education has (with a few notable and distinguished exceptions) been the neglected child of American higher education. While developing as a unique model of education adapted to the needs of adult students, it has been seen as an extension of the regular full-time day model. There has been a reluctance by educators to recognize the learning needs and patterns of adults as being different from those of young students and equally legitimate. Extension higher education, while reaching many people, has been exploited financially to subsidize the full-time day programs of many institutions, the credits it gives are often transferred into the day program only with great difficulty, if at all, and its operational differences from the full-time day program have been seen as negative rather than positive attributes.

Characteristics developed in evening and part-time continuing studies such as open admissions, the integration of work and school in a student's life, the use of adjunct faculty drawn from the community, self-paced progress toward a degree, nondegree work, courses designed in response to student needs and preferences, responsiveness to community needs, and noncredit work, have historically not been seen as desirable in the traditional model of full-time day higher education.

It is curious, however, that in the early 1970's these very attributes are being put forth most avidly by the advocates of educational reform for full-time day collegiate instruction. In fact, many of the elements that commissions and innovators in full-time higher education are "initiating" have existed in extension and continuing adult education for years. Continuing education has in some measure avoided the problems of homogenization of missions, of professionalization of faculty, of discipline control and of student lockstep which have afflicted full-time higher education.

---

* The word "system" as used in this discussion is not meant to convey a governance structure, but an assemblage of institutions and organizations which provide continuing and part-time postsecondary education and who by virtue of that fact are in a state of interaction and interdependence.

The continuing education efforts of postsecondary institutions in Massachusetts constitute, de facto, an alternative higher education system which by design is geared to adult needs rather than those of youth. Continuing and part-time education in Massachusetts is significantly and appropriately different as an educational model and as a Statewide system from the traditional full-time-day-higher education. Data throughout this report, when compared to data on regular programs, clearly illustrate these differences in clientele, faculty, hours, programs, etc.

This alternative system of postsecondary education in Massachusetts is serving in excess of 110,000 students: 90,931 are in continuing education and 19,339 are half-time (or less) students in regular full-time programs. There is likely to be a large increase in the next several years. Given the difference in educational model and clientele, and its size, it warrants significantly different State policy approaches to its planning, financing and management.

The achievement of a strengthened alternative postsecondary education system designed to meet adult needs, to maintain its nontraditional operational characteristics and not subordinated to the full-time day system will require financial autonomy and administrative equality with day programs. The structure of institutional and behavioral incentives will have to be modified if the system is to function effectively. If this is done, the efficiency and responsiveness of the adult model can be further increased and access to it opened for many who are now excluded because of barriers such as time, place, cost, credit, course format, teaching style, etc. Many of the recommendations which follow in this report are designed to support and strengthen the "nontraditional" character of part-time and continuing postsecondary education as it is currently being practiced in Massachusetts. An alternative structure based on response to students' needs and demands, as opposed to a structure based on traditional faculty control of discipline-oriented programs, would thus be fostered, and a more distinct institutional mission to serve adults would result.

Massachusetts has two systems of postsecondary education and both should be recognized as being desirable and worthy of public support. In the past, the system geared to adult needs has been neglected. The two postsecondary education systems serve different clientele groups (college age youth and adults) with different needs. State policies should accord equal status to the two systems while recognizing and fostering their necessary differences. While both systems deserve public support, the mechanism by which that support is provided should be different. These premises are elaborated in the recommendations which follow.

Some would argue that adult continuing and part-time education programs are quite properly subordinated to the regular full-time programs. Such an approach, while convenient to faculty and administrators in the full-time programs, is not likely to be in the adult public's best interest. While the present subordinated arrangement is meeting some of the educational needs of some adults with some measure of success, many individual and social needs are not being met. The system is therefore, somewhat dysfunctional and not fulfulling its potential. The subordination of part-time adult to full-time youth study is a major reason.

Thus while part-time study in the regular full-time day programs of college should be allowed in special cases, the continuing education system should remain the locus of part-time study. Continuing education ("The Alternative System") should offer daytime courses to meet certain needs, but part-time students should be enrolled in the school of continuing education and part-time study on each campus. While funding for day programs in public institutions could be on a full-time-equivalent rather than full-time-students basis, relatively small numbers of part-time students should be allowed. The clientele, educational philosophy and mode of operation are different in full-time and part-time postsecondary education. Separate administrative and curriculum structures are warranted for each. The unique needs of adults are much more varied and differentiated than those of youth and can be better served by a postsecondary education system designed specifically to meet these several objectives as its central, not its ancillary, purpose.

A question can be raised regarding the accreditation problems which might ensue if part-time and continuing education becomes separated from full-time day programs. The quality of many evening programs is such that independent accreditation is a feasible alternative, but a more appropriate approach would be for accreditation to be sought and granted on the basis of criteria currently under study by the Committee on Accrediting Non-Traditional Programs recently called for by the Federation of Regional Accrediting Commissions of Higher Education (FRACHE), and other bodies.

It is worth noting that many traditional full-time postsecondary programs are experiencing a leveling off or decline in enrollments, while part-time and continuing education enrollments at traditional institutions continue to rise. There is little doubt that the latent demand for part-time and continuing postsecondary educational services is large; some estimate that only about one-third of the population in the country who want such services are now receiving them. The time is right for the recognition and encouragement of an alternative higher education system designed to meet adult needs in the Commonwealth of Massachusetts.

A comparison is made below of some of the salient differences between the full-time-day-youth model and the continuing education part-time-adult model.

	Full-time-Day-Youth	Continuing-Education Part-time-Adult
ADMISSIONS	Matriculation upon entry	Open admissions

	Full-time-Day-Youth	Continuing-Education-Part-time-Adult
PROGRESSION	Regular progression geared to full-time student status although some part-time students allowed.	Free entry and exit, self paced, geared to part-time student continuing his education
CLIENTELE, CHARACTERISTICS AND ATTITUDES	18-23, often in college because it is most convenient way to spend that particular time period or believe it should be done	23+, part-time, very high motivation, clearer sense of goals in pursuit of education, higher percentage have job-related objectives, have more knowledge from life and work experiences
SOURCE OF CLIENTELE	May draw students from a state or region or nationally	Nearly all students drawn from within a several mile commuting distance
FACULTY	Full-time, tenure	Contract faculty, part-time nontraditional (some), non-union, selected on the basis of professional competence (some) rather than discipline degrees
CURRICULUM	Tight discipline and curriculum committee control often perceived by students as marginally relevant	Flexibility to respond quickly with new courses and programs, direct accountability to the consumer (students). Offerings more determined by response to need for a given group of learners
RELATIONSHIP BETWEEN STUDENT AND UNIVERSITY	Student tied to a single institution	Often student learns at different institutions and organizations which are geographically convenient to him (unfortunately transfer policies sometimes inhibit this)
RELATIONSHIP BETWEEN UNIVERSITY AND COMMUNITY	Usually somewhat distinct and sheltered	Close relationship, programs and consumer often instituted and tailored in response to community needs

	Full-time Day Youth	Continuing Education Part-time Adult
ACCOUNTABILITY	Faculty and departmental prerogative rather than student preference prevail, discipline and tenure based.	Student-consumer choice prevails over faculty prerogatives, performance based

An alternative system with a degree of autonomy is necessary if the operational differences noted above are to be maintained. The alternative of absorbing continuing and part-time education into the regular full-time programs would mean loss of unique identity and the valuable characteristics noted above.

It has been argued by some that the greatest educational advantage comes from mixing age groups in postsecondary education. Such comments fail to reflect the imbalance between what experienced adults learn from 19 year olds in a class and vice versa. In fact, adults require different styles of teaching, prefer different types of surroundings, may be reluctant to reenter a college program full of competitive youth, prefer the company of other adults in learning and require a different range of supportive and counseling services.

Moreover, a system designed to serve adult needs should look less like the traditional day higher education system and more like a network involving several functions: needs (demand) analysis, outreach, open admissions, guidance, teaching, job-related courses, multiple access points, etc.

The proper role of the proposed Massachusetts Open University in this alternative postsecondary education system is discussed in detail in a subsequent section. The MOU and the existing continuing education activities should be designed to be compelementary and not duplicative. There are several functions the MOU can perform as a component part of the Alternative Postsecondary Education system.

VI.B Planning by Geographic Service Areas: Interinstitutional Cooperation and Coordination

Major Recommendation:

Voluntary Service Area Planning Boards should be established in each of the thirteen geographic service areas this Study has identified. These Boards should be comprised of the president (or his appointed representative) of each and every core and periphery institution within each service area. These SAPB's should have a variety of responsibilities and functions (outlined later in this section). These SAPB's will provide a mechanism for coordinated area-based planning for part-time and continuing postsecondary education in Massachusetts.

Rationale and Sub-Recommendations:

Because of the diversity of educational resources in Massachusetts and because of the quality and depth of the offerings in the various provider sectors in different areas of the State, it is essential that the area planning board be broadly representative of all part-time and continuing postsecondary education services if they are to best serve the public interest. The provider sectors to be represented include colleges and universities, proprietary schools, adult education programs, private adult centers and vocational-technical schools.

State financial support for the area boards is a high priority, and the Commonwealth should provide 75% matching funds to 25% funds contributed by member institutions to the SAPB's. It is suggested that the State and member institutions contribute in some proportion to total relative enrollment in the area and in the institution. The total budget should be of the order of four dollars per student in the service area or about $420,000 annually for the recommended thirteen SAPB's.

The SAPB's should not have formal program-approval authority (which authority properly rests with the Board of Higher Education) but they should provide a voluntary planning and negotiation forum and they should be advisory to the BHE. The SAPB's are not to be an arm of the BHE, but rather a forum in which essentially local problems of needs analysis, competition, gaps in programs, relationships with employers, etc. can be worked out by reasonable discussion between the institutions involved. When voluntary resolution fails a more active BHE role would be indicated.

The major incentives for the formation of the area boards are: 1) State matching money will permit additional expenditures on outreach, advertising, etc. which the member colleges could not manage alone; 2) participation in an SAPB would be a condition of eligibility for the State adult part-time postsecondary vouchers; 3) SAPB's provide a mechanism for the resolution of differences through negotiation between those involved and thereby avoid involvement of Statewide arbitrators that institutions on occasion prefer not to have involved; and 4) the SAPB's operations will provide the institution with a variety of positive benefits ranging from listing in the quarterly publications of its offerings to expanded outreach to participation in the proposed open university and its network of institutional affiliations through area learning centers.

The rationale behind this major recommendation, as well as the corollary sub-recommendations are elaborated in the four following sections: The Current Situation in Massachusetts; Recognized Need for Planning of Continuing Education by Geographic Areas in Other States and Lesgilative Action; Geographic Area Planning in Massachusetts Higher Education Under Present Voluntary Arrangements; Proposed Service Area Planning Boards (SAPB's) for Adult, Continuing and Nontraditional Education: Justification and Functions.

The Current Situation in Massachusetts

There is a clear need in Massachusetts for coordinated planning among the providers of part-time and continuing adult postsecondary education. Very little cooperation or coordination in planning of continuing and part-time services between institutions exists, although there is some cooperation in full-time programs. Competition between continuing education programs is often severe and several private institutions' programs have or may close due to new public program competition. Coordinated planning among institutions directed toward the most efficient way to meet needs with existing resources is totally absent. To the extent planning does occur, it is almost always without exception when a specific request is made from an outside group for a particular service. The findings of this Study, and analyses and conclusions drawn from several other states make it clear that such planning done by geographic region or area is more appropriate than Statewide planning.

As discussed in detail in the findings section of this Summary Report, continuing and part-time education is heavily residence determined, most students living within a few miles of the campus they attend. From a consumer's point of view, the combined offerings of the several institutions within a given radius of his home are more important than offerings by a single type of institution Statewide. Further, because of the attendance patterns, competition, overlap, duplication, "gaps" are all terms which only have meaning in the context of institutions in a natural attendance-determined geographic service area.

In a given metropolitan area there might well be several degree-granting two- and four-year institutions, several proprietary institutions, several public school adult education programs, and a regional vocational technical school, together with students enrolled in various home study programs. Representatives of these various provider sectors seldom talk to each other, and an atmosphere of competition and self-preservation exists. Further, new institutions or branch or satellite teaching centers will open up in a given area and initiate programs that are parallel to programs already being offered, sometimes identical, without discussions with representatives of the other providers. Finally, while there is nominally a course and program review procedure which involves the public segmental boards and the Board of Higher Education, this review authority has never been implemented in part-time and continuing education with sufficient constancy and force to have any significant impact on the shaping of part-time and continuing postsecondary offerings.

The "system" as it now exists is the result of a collection of independent and unrelated entrepreneurial efforts motivated by a variety of factors, only one of which is service to the needs of the community. Indeed, the incentive for each institution to grow unchecked is usually stronger than the service incentive. This pattern of incentives should be altered, not because entrepreneurial competition is bad, but because in the present arrangement it is not channeled properly. With a functioning SAPB, entrepreneurial efforts will be redirected from duplicative programs competing for the same students and leaving others unserved to complementary programs serving a broader range of student and community needs. This will occur if the recommendations in this report are implemented because the pattern of incentives determining institutional behavior will be changed in several specific ways.

The present situation of unrestrained "zero-sum game" competition is not in the best public interest because it is not conducive to either the most efficient utilization of resources, or the maximization of the scope, comprehensiveness, and variety of services offered to meet the educational needs of the area. Moreover, the existing unplanned and unregulated competition has caused some serious problems of public-private institutional relations. There is evidence that the unchecked growth of public sector continuing education, in some instances, is causing a drop in private sector continuing education enrollment, both degree-granting and proprietary, to the point where several institutions have either terminated or curtailed programs or closed entirely. This is occurring not because in any systematic and rational State planning effort a collective decision was made to decrease the role of the private sector, but because the incentives for entrepreneurial growth of continuing education programs rest entirely within each individual institution. It can be in a given institution's best interests (both in terms of organizational growth and financial incentives) to capture an existing market previously served by another institution. It would be in the public's best interest if new program efforts were directed at gaps in existing services instead of duplicating successful programs.

The tuition differential (a factor of two or three) between public and private gives the public institutions an enormous competitive advantage, overriding more constructive competition along dimensions of variety, quality, and innovativeness. Rather, public institutions, with a price advantage and a pattern of institutional incentives which encourage profit maximization to generate a surplus, often face greater rewards for duplicating a successful program at a neighboring institution and attracting its students away than for instituting a new program in a new field to serve underserved clientele.

On grounds of maximization of service, such competition is not beneficial since in spite of the competitive duplication, large gaps in services provided exist. Moreover, since the lower public tuitions result from indirect and non-explicit institutional subsidies and do not reflect true costs, the duplication cannot be justified on cost/effectiveness grounds and is simply wasteful of the indirect public subsidy. In the section of these recommendations dealing with finance, an alternative method of State subsidy to students is discussed as a mechanism for fostering competition more coincident with the larger public interest and creating a freer "educational common market" within each service area.

The seriousness of the effects of this unchanneled public-private competition can be understood by noting the importance of part-time and continuing education programs to the financial structure and survival of private institutions. For many private institutions without a large endowment, the part-time programs constitute a "living endowment" which is depended upon each year to produce a certain surplus needed for the college's overall operation. In effect, this "surplus" is an overhead payment by the part-time division to the full-time division for the use of facilities at the institution. For the school as a whole, this source of income is often critical. Thus, if a public institution's continuing education program grows at the expense of a private institution nearby, the financial repercussions on that private institution from mere loss of a few hundred students in the evening program are often far more serious than one might think. SAPB's will provide a mechanism for fostering coordination and cooperation and channeling competition.

Enhancing cooperation between various types of institutions (core and periphery) is important for another reason. Very often, a student who may feel intimidated about enrolling in a credit college course will feel comfortable enrolling in a public school adult education course or a vocational school course. After a successful experience, he may proceed to take other courses and eventually move into credit undergraduate and even graduate work. At present, the poor pattern of communication and planning between the various providers places the burden of articulation entirely on the shoulders of each potential student. This structural barrier coupled with insufficient counseling opportunities is too great for many potential students to deal with.

Recognized Need for Planning of Continuing Education by Geographic Areas in Other States and Legislative Action:

The need for increased statewide and area-based planning for part-time and continuing postsecondary education has been recognized across the country for the last few years. Several states now have in operation or are implementing integrated continuing education planning by region or area. These states include New York, Indiana, Iowa, Wisconsin, Virginia, North Carolina, South Carolina, Oregon and Vermont. The specifics of the planning model and mechanism in each state vary, but the common themes are: first, a recognition of the geographic service area character of part-time and continuing education; second, a recognition of the need to have more integrated planning between the several types of providers; and, third, a recognition of the need and desirability of maximizing the efficiency of utilization of existing educational resources.

An interesting example is Virginia where regional consortia for continuing education among public institutions have been legislatively mandated. Each consortium has a board of directors comprised of the presidents of each institution, and the consortium issues a joint catalogue and performs joint needs analysis. Further, Virginia has legislatively mandated its State Council for Higher Education to effect the coordination of continuing education offerings among the public institutions throughout the State.

In Vermont, the feasibility of including independent institutions in a statewide comprehensive system of continuing education is demonstrated by the highly regarded non-campus Vermont Community College. Also included in that system are a broad range of arrangements and services in addition to degree-granting and credit programs.

Other examples of recommended structures for coordination of provider sectors through local area councils include those of the National Advisory Council on Adult Education for career education and "Adult Education: A Plan for Development" in Great Britain.

In this study, rather than a legislatively mandated approach to cooperation and coordination, a new pattern of incentives are recommended which taken together will foster rather than force institutional behavior consistent with broader public policy goals. (Some of these incentives were mentioned at the beginning of this section, those and others are discussed in each section of these recommendations.)

Geographic Area Planning in Massachusetts Higher Education Under Present Voluntary Arrangements

The notion of basically voluntary (with built-in incentives) geographically based planning groups and consortia is not new to Massachusetts. There are, in several regions, functioning consortia which are oriented around the full-time programs of their member institutions. These include the Worcester Consortium, the Five Colleges Consortium, a consortium of junior colleges in the New England area, and several groups which prefer not to consider themselves formal consortia but rather voluntary associations such as the Southeastern Association for Cooperation in Higher Education in Massachusetts, and the Cooperating Colleges of Greater Springfield.

However, these voluntary arrangements have had little effect on coordination of part-time and continuing postsecondary education. Further, these groups consist of the degree-granting two- and four-year institutions (the "core") and do not include the postsecondary providers of the "periphery" (proprietary and independent schools, home-study schools, public voational-technical schools, adult education centers and programs, and employer based postsecondary education). Nevertheless, the viability of voluntary area-based, cooperative arrangements and coordinating organizations has been spontaneously demonstrated, and the disposition toward such arrangements is favorable. State policy should encourage this voluntary approach rather than encourage the status quo or than institute an involuntary model of cooperation.

Other "coordinative" arrangements should be noted. For example, the State colleges among themselves and the community colleges among themselves operate in a manner such that each institution respects the "territory" of other institutions. Thus, a community college is unlikely to open a branch campus or satellite teaching center in the region of another community college. This unwritten coordination, however, appears to exist only among like institutions. Community colleges, State colleges, the University of Massachusetts, private institutions, and proprietary institutions show little reluctance to "invade" each other's territory with satellite offerings of courses, not to mention whole new campuses and new programs.

Another example of a cooperative arrangement between several institutions and several school systems is the Merrimack Valley Education Center which provides continuing education for teachers. This center does needs analysis for a group of school systems in the Merrimack Valley, and then arranges with appropriate educational institutions to provide the in-service teacher training. The proposed SAPB's would perform similar functions but for a much broader spectrum of adult postsecondary education needs, and with a much broader spectrum of institutions.

A unique arrangement is the Metropolitan Cultural Alliance in Greater Boston consisting of fifty institutions including schools, colleges, adult centers, museums, societies and others. Its objectives are maximizing service through more efficient complementary utilization of resources.

Other area-based cooperative arrangements under consideration are the possibility of a consortium-based external degree under the Worcester Consortium, and the proposed Massachusetts Open University in which regional or area-based operations through a network of learning centers are contemplated. Locating the operating responsibilities with the SAPB's for continuing and part-time postsecondary education programs in the learning centers is recommended elsewhere in this report.

Proposed Service Area Planning Boards (SAPB's) for Adult, Continuing and Nontraditional Education: Justification and Functions

The current attendance patterns of students enrolled in part-time and continuing postsecondary education in Massachusetts determine thirteen geographic service areas. (See discussion earlier in this report) The thirteen areas are listed below:

1. Springfield Service Area
2. Pittsfield/North Adams Service Area
3. Amherst/Northampton Service Area
4. Worcester Service Area
5. Fitchburg/Gardner Service Area
6. Framingham Service Area
7. Lynn/Salem Service Area

8. Andover/Lowell Service Area
9. Burlington/Bedford Service Area
10. Brockton Service Area
11. Fall River/New Bedford Service Area
12. Falmouth/Barnstable Service Area
13. Boston Service Area

Given the crucial importance of area-based planning for continuing and part-time postsecondary education, area-based planning should take precedence in the case of these thirteen service areas over Statewide and system-wide planning. It is essential that the membership of an SAPB include all the core and periphery institutions within the service area, and that each institutional representative be its president or someone specifically and officially designated by its president. Each SAPB should create a series of working committees consisting of representatives of the business community, the industrial community, professional associations and community agencies in order to implement its purposes.

Before delineating the specific functions and responsibilities of an SAPB, a review of the justification for their existence is in order. It is clear from the data assembled on attendance patterns in this Study that the consumer will only consider the continuing and part-time education offerings within the geographic service area in which he lives. The student questionnaire data further supports this observation with a high proportion of students indicating an unwillingness to travel more than twenty miles to a part-time (often evening) course. Another important reason for area planning is the fact that competition between institutions occurs at the level of specific subjects and programs within a specific geographic service area. Consideration of program duplication and overlap on a Statewide basis is not very useful. Prospective students living in Springfield are unlikely to drive to Boston for a course, and hence identical programs in Boston and Springfield cannot be considered to be in competition with one another.

Further, there a variety of counseling and outreach functions which, from a consumer's point of view, are best provided on an area basis rather than being duplicated in limited measure by each individual institution. The articulation possibilities for students going from lower division to upper division programs, transition from the taking of noncredit courses into credit courses and from secondary level continuing education into postsecondary continuing education, can be facilitated by area-wide cooperative institutional efforts.

Moreover, the nature of demand and of population needs varies from area to area. Each service area has its particular economy, mix of urban and rural elements, and type of population. Each area differs in the pattern of program offerings, competition, and articulation. Further, the particular institutional mix varies between area and the problems differ. For example, in several areas further public program growth will be detrimental to the already suffering private institutions in the area; but in some further growth would be desirable.

Planning is therefore likely to result in a wide variety of programs and policies tailored to the particular characteristics of each area. Uniformity of the planning process is important, uniformity of the results of planning is inappropriate.

An argument against area-based planning which notes that full-time education efforts of colleges and universities in Massachusetts are not planned primarily on an area basis is inappropriate. As delineated in the preceding sections, the operational characteristics of continuing and part-time postsecondary education make it significantly different as an educational model and system from the full-time day model. As such, it warrants significantly different approaches to its planning, financing, and management.

Additionally, while the public sector is organized in Statewide systems, even within those systems, regionally specific planning for continuing education has been practiced. The strengths of area planning rather than Statewide planning become clear in the following example. Intersegmental planning between the University of Massachusetts and the community colleges is desirable. However, if it were to result in extensive offerings of upper division courses on each community college campus by satellite teaching from U./Mass., each of the community colleges would be de facto converted into a four-year institution which could be attended to obtain first an associate degree from the community college, and secondly a U./Mass. baccalaureate. This may be appropriate where there is a scarcity of baccalaureate level programs in continuing education, but it will be wasteful and undesirable where there are several other institutions in the area already offering baccalaureate level programs and serving two-year college continuing education transfer students.

Finally, the use of educational technology can be planned and implemented on a Statewide, regional or area specific basis (as elaborated in detail in a subsequent section).

Thus, from the perspective of planning for client needs, addressing competition and coordination between institutions, and providing efficient utilization of educational resources throughout the State, area planning by attendance-determined continuing education service areas is appropraite. The thirteen areas suggested here are not in any way a comment for or against the pending education reorganization plan. The question of whether thirteen basically voluntary planning and coordinating forums should exist is independent of whether the whole public education structure is more effectively organized on the basis of statewide or regional governing boards. The proposed SAPB's could function in either case, for in niether would they be an arm of the statewide or regional governing boards. Further, while state organization should be affected by Federal policies such as the trend toward funding programs based on uniform substate regions, voluntary associations to solve certain problems need not always follow the same organizational patterns. Such is the case with the proposed SAPB's.

The mode of operation of an SAPB will be such that all policy matters should be decided by the Board itself, being a representative body of all affected institutions. While the SAPB will have no coercive power, it will have incentives to offer for cooperation, and it will provide advisory opinions to the Statewide Board of Higher Education, the public Segmental Offices, the Secretary of Educational Affairs and the Legislature. The work of the Board itself will be accomplished through Board meetings, through working committees (described earlier) and perhaps (in larger service areas such as Boston) by a small staff (as e.g. the Central New York External Degree Consortium.)

The Statewide Board of Higher Education will retain the retain the responsibility it now has under existing laws for program approval and review. The new element is that the BHE will now have the advice of the appropriate SAPB in any matter. The SAPB's are not arms of the BHE and are not coercive organizations. Any institution retains the opportunity to seeks BHE review of any question which cannot be resolved in open discussion in the SAPB. They have that option now. What the SAPB's provide is a mechanism to get institutions talking together to resolve their own problems. Thus, without coercive legislation or an intrusive Statewide BHE, matters can be resolved in the public interest. The BHE can concentrate its attention on the troublesome and important issues in coordinating continuing and part-time education Statewide.

This mode of planning and conflict resolution has the advantage of maximizing communications and local resolution of interinstitutional problems of conflict, coordination, and cooperation. It also permits the Board of Higher Education to "oversee by exception," thus reducing to manageable proportions the workload of program review which has in the past been so great that the authority of the Board of Higher Education in part-time and continuing education review has rarely been asserted.

The functions of the SAPB's are as follows:

Function #1 is to review programs and course offerings in the service area to identify gaps in service, program duplication, course overlaps, low enrollment programs which can be combined into single joint efforts, needs for branch campuses or satellite teaching centers. The SAPB as proposed, while technically voluntary, presents sufficient advantages of participation that only very few institutions would elect not to participate. These incentives will lead to an open forum for discussion and negotiation.

Since program and course competition and overlap occur at the level of specific programs and courses within a specific geographic service area, local resolution is desirable. For example, competitive course "skimming" (starting high enrollment courses needed by a neighboring school to subsidize their low enrollment offerings at that school) may have severe consequences on area institutions. In time, threatened institutions may as a form of protection respond by opposing more open transfer and cross-registration. Such an interinstitutional climate would not be in the long run public interest in the area, and it is best resolved through negotiation among the principals in the SAPB.

The functioning of the SAPB in the process of program review will be a process which combines the subtlety of diplomacy with the bluntness of facts. Thus given the data in the Volume II technical report to this study, each SAPB should in the first meeting review that data to establish an agenda of priority concerns for the area. It is the combining of the several types of data that enables the SAPB to pinpoint specific problems. Attendance patterns for each institution reveal the origin of students. Student questionnaire data reveals similarities and differences between clientele served by each institution. The program and course inventory reveal specific areas of competition or gaps in service. When there is competition, the dates of opening of programs reveal which institutions duplicated programs of others, and institutional enrollment trends (with the accompanying list of key events such as introduction of a new degree at one school) depict the effects of the competition. Data on the periphery can be compared with data on core institutions to illustrate the effect of competition between the sectors. Finally some estimate of needs can be obtained from the economic profile data.

Function #2 is to provide a forum for communication among staff at various member institutions. Issues such as transferability of credit, or the adoption of the continuing education unit as a uniform method of certifying non-credit continuing education within the service area can be redily handled through this mechanism and the task oriented subcommittees.

The SAPB's will have no coercive powers over their member institutions' policies in transfer, admissions, and cross registration but they will provide negotiation forums in which each member institution will become familiar with the policies, needs and activities of other providers within each service area.

Function #3 is to perform needs and opportunities analysis and enhance communication between the institutions and the community at large. Since each geographic service area is different along many dimensions (industrial mix, previous education or population, etc.), educational needs will vary from area to area. Educational needs will also vary over time as socioeconomic conditions change. It should be the responsibility of each SAPB to monitor these changing needs, to identify new postsecondary education services needed, and to present them to the SAPB for discussion and determination of how the need will be met, either through joint efforts of by a single well-qualified institution. For example, needs analysis should follow closely job markets so that planning of course offerings in an area can be linked to job market opportunities. Through joint subcommittees the SAPB should be in close contact with the area Manpower Planning Board or Manpower Area Planning Council in that area. For example, needs analysis should follow closely job markets so that planning of course offerings in an area can be linked to job market opportunities. Course and program offerings which do not attract many students ought to be recorded from year to year so as to provide a picture of the kinds of programs for which there is very little interest and which might be candidates for merger or termination.

Further, through its working committees the SAPB should become aware of the potential for converting many community resources into educational resources. The training programs and resources for hospitals or industries might in some instances form the base of new programs or course offerings in joint arrangements with area institutions. This might avoid the necessity for whole new AA or BA programs or new institutions being developed from scratch. This is particularly true in the larger cities where appreciable duplication has already occured.

An SAPB would be more likely than a single institution to make program decisions on grounds of service needs (demand) and use of existing resources (efficiency), rather than on grounds of individual program or institutional growth and profit maximization.

Function #4 is to publicize the offerings of all the member institutions in a quarterly periodical. This publication together with a telephone information center on part-time and continuing postsecondary education within each geographic service area will facilitate the use of the offerings by residents of the area. The current information and publication activities of the Educational Exchange of Greater Boston and the joint publication of the members of the Worcester Consortium are examples of this kind of effort already in use within Massachusetts which should be funded through the SAPB's. Other successful publications are: a Northern Virginia consortium joint catalogue that has been highly effective as an advertising vehicle, a computerized course listing in a Canadian city and a quarterly catalogue in the form of a magazine in California.

Function #5 is outreach to maximize the exposure to part-time and continuing educational opportunities of groups not well-served by the current system. (Access is discussed in more detail in a subsequent section). This outreach function should involve advertising through radio, television, newspaper, and the periodical mentioned above, and through the holding of public "open houses of educational opportunity" and "hearings" at which needs and services can be discussed with community members and groups. The present pattern of each institution doing its own outreach is leaving several population groups underserved.

Function #6 is to provide academic and vocational counseling services to prospective students. It is not anticipated that these services would supplant those provided by individual institutions, but rather be addressed to the counseling needs of a prospective student before he enrolls in a given program. A variety of studies including evidence from the student questionnaire reported earlier indicates that the present counseling and guidance programs are severely lacking. Hence, there is a great need to strengthen the pre-program-entry and the post-program-entry counseling available to continuing education students. Such services as child care and bus transportation from a housing project are services that might still be provided more effectively by each individual institution and should be so.

Function #7 is to operate cooperative area Educational Opportunity Centers. In the next section on access, specific recommendations are made regarding the creation of cooperative Area Educational Opportunity Centers as mechanisms for outreach and counseling and their mode of operation.

Function #8 is cooperative interinstitutional planning and articulation of career ladders and programs. The need for such articulation in some areas within the State has been identified and documented in Volume II of this report and it should be under routine scrutiny within each geographic service area. Students should have available to them career and program ladders which might involve several institutions.

Function #9 is to facilitate the structuring and arrangement of joint special offerings such as the use of educational technology or the use of special resources (e.g., such as a museum within a given area to offer a particular type of course, or a joint cable-vision series as was done in the Raleigh Colleges Consortium in North Carolina.)

Function #10 is to operate the proposed learning centers of the proposed Massachusetts Open University. It is suggested that there be at least one MOU learning center located in each geographic service area.

Function #11 is to review satellite teaching centers and/or branch campuses operating or proposed within the service area. The satellite teaching centers might, for example, be operated jointly by two or three institutions in the area, each offering a few courses and providing a range of opportunities to a previously underserved population. Such review is another example of voluntary resolution of differences and voluntary planning by the institutions in the service area with that voluntary process being backed by the legislatively mandated responsibility of the Board of Higher Education for review of branch campuses and satellite teaching centers. This is another BHE role which has not been exercised as strongly as it might be, and it is our judgment that it be best exercised through a process of dealing only with those cases which cannot be satisfactorily resolved in the SAPB on a voluntary basis.

Function #12 is to advise State officials regarding the location and openings of new campus facilities. The Board might be a forum in which the opening of a new institution (for example, a third community college in the greater Boston area - southwest) would be discussed with institutions already in that area so that the continuing education program of the new institution would be phased in with existing programs with a minimization of stress and conflict.

Function #13 is to assist the Statewide Board of Higher Education in administering the specific clientele group vouchers recommended in the finance section. These vouchers would be apportioned among the service areas on the basis of percentage of the Statewide population of the particular clientele group being considered that lives within the service area. Further, the vouchers as discussed elsewhere will be tendable only in the continuing and part-time postsecondary programs of institutions which are members of an SAPB.

The specific characteristics and functions assumed by each SAPB will depend on the specific characteristics of that area and the disposition of the particular institutions in that area. This variation is desirable since different areas have different problems and needs. In order to qualify for the State SAPB grant funds recommended elsewhere, an SAPB should submit an annual proposal to the Board of Higher Education (the suggested managing agent for the funds) for an amount up to the area's allotment. The annual proposal should contain a substantive and financial report of the previous year's activities.

To get the SAPB's underway it is recommended that the Secretary of Educational Affairs initiate the obtaining of a State appropriation for an SAPB grant program, and that simultaneously the Board of Higher Education or the Massachusetts Advisory Council on Education immediately convene organizational meetings in each service area. These initial meetings should focus on a review of the data assembled on each area in the Technical Report (Volume II) of this Study and an identification of the priority problems and issues to be addressed in each area. With the new data base available (Volume II), sound service area based planning for continuing education can begin to take place. The SAPB organizational meetings should initiate that process.

VI.C. Statewide Planning Coordination and Program Review

Major Recommendation:

There should be in the Board of Higher Education (or the Proposed Board of Postsecondary Education) a specific designation of a Deputy or Vice-Chancellor in charge of continuing and part-time postsecondary education. This official should coordinate on a Statewide basis the work of the SAPB's and perform certain Statewide planning functions. It is further recommended that this official work closely with Department of Education officials in charge of occupational education, adult education, and extended services to bring about coordination between their efforts and postsecondary education at the Statewide level, while cooperation in each service area is achieved through the offices of the SAPB.

Rationale and Sub-Recommendations:

In the discussion of the SAPB's functions above, several references were made to planning, coordination, program review to be performed at the Statewide level by the Board of Higher Education, proposed Board of Postsecondary Education or the proposed Open University. The SAPB's should not have legally mandated authority to approve or disapprove programs or branch campuses. That legal program and branch campus review authority should remain with the Statewide Board.

The Statewide Board should have several functions as noted below. However, given the existence of the SAPB mechanism for resolution of many planning issues, the BHE (BPE) will be able to concentrate its attention on major issues of policy, funding and program review.

The BHE should:

(a) Coordinate the efforts of the SAPB's and administer the SAPB matching grant funding program.

(b) Be the site of resolution of disputes not resolved at the SAPB level by exerting its legal mandate to review new programs, overlapping or duplicative programs, branch campuses and satellite teaching centers as needed.

(c) Administer the proposed Postsecondary Adult Continuing Education Vouchers for Special Clienteles program, working with the Service Area Planning Boards

(d) Work through the SAPB's to implement on a regular basis the Statewide information system instituted in the process of this Study. It is of central importance that the detailed and accurate data base on continuing and part-time education now be maintained. While data may be collected through the SAPB's it should remain the responsibility of the State BHE (BPE) to perform annual analyses of continuing and part-time education.

(e) Establish a certificate of need approach to reviewing new programs in continuing and part-time education. Such an approach, used with success in public decision-making about new medical care facilities, would place the burden of proving need on the institution beginning a new program.

So that the BHE (BPE) can carry out these functions effectively, additional funds should be appropriated to that agency for administrative and support staff.

Further, the Legislature should clearly and specifically reaffirm the responsibility of the BHE (BPE) to review and approve programs in continuing and part-time education. While the BHE technically has these powers and responsibilities at present, they have rarely been asserted, and are not taken as seriously by public institutional segments as they should be. By and large, the public institutions and segments have done what they please in these areas. A legislative reaffirmation would enhance the effectiveness of the BHE (BPE) in its coordinating role.

The certificate of need approach described above coupled with stronger BHE (BPE) program review authority could curtail somewhat the profit-motivated duplication of programs which now sometimes occurs. However, the program review authority of the BHE (BPE) in any given case will depend on the particular charter of any given institution. Some institutions have the authority to offer a variety of programs and degrees; others must seek BHE approval in each case. It is, therefore, highly desirable that the SAPB mechanism will complement the BHE in its program review function. Many issues which are not amenable to BHE resolution can be agreed on in an SAPB. The question also remains of when a collection of courses technically becomes a program. Review of formal new programs is not sufficient when new de facto programs are introduced through the technique of offering a few courses in a coordinated sequence. Thus it is necessary that the BHE review of new programs be supplemented by the SAPB review. SAPB's will be aware of such undertakings and can evaluate them in terms of existing offerings and needs.

The public systems (community colleges and State colleges) should have a senior staff person in the central offices assigned specific responsibility for continuing and part-time education and nontraditional study. Further, the systems should consider having a permanent subcommittee of the council of presidents in each system which would be concerned with part-time and continuing and non-traditional study. It is suggested that staff costs be covered by a contribution from the system member institutions to the central office analogous to the present arrangement in the State college system. Seven to ten percent of the total revenues of the continuing education programs of the state and community colleges should be provided for central office staffing with respect to part-time and continuing education and for innovative projects and experiments (e.g., the non-traditional experiments conducted by four state colleges during the past academic year.)

The private colleges and universities having continuing and part-time education programs should contribute a small percentage of their revenues to the Association of Independent Colleges in Massachusetts so it can carry a full-time senior staff person concerned solely with part-time, continuing and nontraditional education. His role would be similar to that of his counterpart in the State college system and in the community college system. A permanent task force of institution presidents should be established within the AICUM to address concerns of part-time, continuing and nontraditional study for the association as a whole.

VI.D. Access: Meeting Unmet Needs

Major Recommendation:

Access to the system of continuing and part-time postsecondary education in Massachusetts should be assured for all elements of the population through a variety of measures: increased use of educational technology, variety of times offered, better transportation services, counselling and outreach services, publicity, vouchers for special clientele in need of financial aid, and the creation of Educational Opportunity Centers in each service area.

Rationale and Sub-Recommendations:

The issue of how to improve access to continuing and part-time education is one which runs through the several sections of these recommendations (Finance, Geographic Service Area Planning, Massachusetts Open University Recommendations and User Demand Estimation). With that in mind only selected aspects of the access question are discussed in this section: unmet demand, barriers to access, relationship to employers, special clientele groups, and access to the alternative system instead of to part-time status in full-time programs.

Unmet Demand

The current system of part-time and continuing postsecondary education in Massachusetts is accessible in theory to all elements of the population. However, under close examination, it becomes clear that low income, low previous education, and other minority groups are underrepresented in the current student clientele in relation to their proportion in the population at large. These client groups have been identified in detail elsewhere in this report. Discussion here will focus on the barriers to access for these underserved groups.

	% of Massachusetts Population	% of Continuing Education Students
Occupation: Management or Professional	25% of employed males 20% of employed females	62% of employed males 57% of employed females
Income: in families with incomes over $10,000	41% of families	76% of males in families 69% of females in families
Previous Education: less than high school diploma	37%	3% of males 2% of females
Age: 18-34	35% of males 30% of females	78% of males 73% of females

Barriers to Access

(Geography, Time, Teaching-Learning Format, Cost, Information, Admission, Guidance, Outreach).

While courses are offered at campuses around the State, many of these sites are accessible only by automobile. Those dependent upon public transportation or those confined at home or detained in prisons or hospitals cannot participate in the current programs. Increased use of educational television and structured self-study arrangements should be provided to break down these geographic barriers. Transportation services should be arranged to remove the access barrier for special groups. Such an approach would be particularly appropriate for elderly groups who are accustomed to travelling together to a variety of activities.

Courses should be offered at different times of the day to be accessible to selected groups of people. For example, women with small children, pre-school or school age, often find attendance at late afternoon or evening classes difficult and are better served by day classes. For other people, the regular meeting of a class one or two nights a week for a period of a few months is awkward, and formats which involve weekend class meetings or intensive self-study with a series of meetings every night for one week or two weeks eight hours a day would be more appropriate. All conceivable variations in the time period structure and format of continuing education offerings should be tried.

Cost can be a serious access problem. In the following Section (E) the provision of vouchers for needy clientele groups is recommended. For those whose income level does not make costs prohibitive, but for whom cash availability may be a problem at the time of registration arrangements should be made with the standard credit card operations to permit payment of registration and course fees by credit card at the time of registration.

Lack of information can be a significant barrier to access. Although all the institutions examined engage in advertising of one form or another, most people know little about the part-time and continuing postsecondary educational opportunities available near their residence Current information dissemination efforts appear to operate in a manner such that they only reach those people who had some interest in seeking out the program. Vast numbers of people are, in fact, totally unaware of the wide variety of offerings, credit and noncredit, which may be available to them. There are some notable exceptions. The use of newspaper advertising and radio or television spot advertisements can be a more effective way of reaching these groups. Information dissemination efforts in part-time and continuing postsecondary education should be expanded considerably in a cooperative manner through the SAPB's.

Admissions are presently not a barrier to access. Most providers have open admissions policies for credit and noncredit work with matriculation dependent upon the student's performance in the actual program rather than previous educational performance.

Access among many underserved clienteles is decisively a function of outreach programs of the schools, the extent to which schools seek out students. Outreach efforts should be focused on (a) the student's perceptions of his ability to perform, (b) his perceptions of the value of the education undertaking he may contemplate and (c) his concern about financial resources.

Access barriers (a) and (b) can be removed through the outreach counseling and guidance efforts suggested below. Barrier (c) can be removed by the voucher program suggested in the financial recommendations.

Substantially increased outreach efforts of various kinds to various population groups should be undertaken. Publicity is one, as discussed earlier. Noncredit skills and refresher courses to help prepare students who have been away from formal education for some years to re-enter schooling is a second. A third is the voucher scheme under which a prospective recipient does not have to decide on a particular college, then attempt to enroll in its program and then apply for financial aid, a sequential process which deters many people, particularly those of lower socioeconomic status. With a voucher system a prospective student knows that he qualifies for an education voucher of a certain amount for certain reasons. The prospective student does not have to search for the financial aid; it has sought him. Knowing in advance that this voucher is his, he can proceed to make decisions about his educational future.

Lack of counseling, personal, vocational and academic, is a significant barrier to access at present. Students surveyed who are presently in the system expressed a strong desire for more counseling and guidance. Extrapolating this perceived desire to non-participating groups that are less able than those currently enrolled to understand and use the continuing education offerings to their advantage, one concludes that lack of counseling and guidance is keeping many people out of part-time and continuing postsecondary education. It is suggested that counseling and guidance be markedly expanded on each campus or service site, and that it be a major activity of the proposed SAPB's.

The recent pilot program in Massachusetts to test the value of client-and area-centered educational opportunity centers was conducted by the Office of the Secretary of Educational Affairs. The centers identified welfare recipients who would potentially benefit from higher education, provided them with counseling and diagnostic assessment, and assisted them in identifying those particular educational opportunities which would be most appropriate to their needs and then in enrolling in programs. Such client-and area-focused centers proved successful on a pilot basis. Area Educational Opportunity Centers (AEOC's) should be established in each service area under the auspices of the SAPB's to perform outreach, counseling and guidance functions. Centers should be located so as to be easily accessible to disadvantaged population groups.

Another barrier to certain groups may be their perception that continuing education has no value to them. Outreach counseling may show these groups that particular programs can, in fact, be of value to them in the job market. Continuous analyses to determine more precisely the interest and perception of particular client groups and coordinated area planning of appropriate programs should be performed by the SAPB's.

It is worth noting the experience of the Illinois State Scholarship Commission when it undertook to create a special Office of Informational Services and end its dependence on schools and colleges as its major outreach mechanism. Schools and colleges had not proven to be very useful as outreach vehicles to underserved urban and rural clientele groups.

Media publicity proved only slightly more reliable. The Commission found it necessary to develop direct lines of communication to underserved communities by providing services to "non-school agencies" such as churches, public aid offices, boy's clubs, and community action agencies. The Illinois State Scholarship Commission established such lines of communication and identified thousands of individuals outside of the mainstream of the educational system who needed some encouragement and direction to be brought back into that system.

A systematic effort, preferably done on a cooperative basis between a group of institutions, to establish lines of communication with such non-school agencies in each geographic service area should be undertaken. Such an effort would identify and attract a large number of potential adult students.

Relationships With Employers

The SAPB's should also undertake specifically to contact employers to determine the most appropriate way in which the continuing education system can serve employer needs. There are within the present part-time and continuing postsecondary education system in Massachusetts some notable examples of constructive relationships to employer groups, ranging from large numbers of students being subsidized by companies at a particular institution to credit courses and degrees being offered through a program entirely on site at the employer's site of operation. Such arrangements should be specifically encouraged by the SAPB's. Specific relationships are discussed in Section VI.J., Continuing Education and the Economy.

Special Clientele Groups

Data presented earlier clearly indicates that students currently enrolled in continuing and part-time education are concentrated in certain programs: 25-35 age bracket, professional or managerial occupations, average or better income. Participating women are an even more elite group.

A high priority in the growth of continuing education must be increased service to presently underserved clienteles. These include the disadvantaged, those of low previous education, those of low income, those of low occupational status, the elderly and certain groups of women having middle or low income or low previous education.

The Disadvantaged:

The psychological and financial access barriers facing the disadvantaged have been described above. With the proposed Area Educational Opportunity Centers and the Special Clientele Vouchers these two barriers can be largely removed. A third barrier in the case of the disadvantaged is geography. For a variety of reasons courses must be offered near the place of residence. Therefore, branch campuses and satellite teaching centers should be the principle mode employed to serve the educational needs of disadvantaged adults.

With the proposed voucher system, institutions would have a clear incentive, now lacking, to undertake such operations. Hence, the proposed SAPB educational opportunity centers, the special clientele vouchers, and new branch campuses in disadvantaged areas are mutually reinforcing and comprise an effective strategy for meeting educational needs for disadvantaged adults. In addition, linking of continuing education offerings in part to job market opportunities is a particularly important service to render the disadvantaged.

Differing models for branch campus services to this clientele group include the S.U.N.Y. Urban Center in Brooklyn, the Boston Model Cities Higher Education Program and the Action for Boston Community Development - Middlesex Community College Program. All prove that when the disadvantaged poor have purchasing power (through a categorical program or the proposed Special Clientele Vouchers) institutions will respond and provide service. Further they demonstrate clearly that adult part-time students have very different needs from full-time students. The adults perceive the economic value of education, but they question their own abilities to make it pay for them given past bad experience in school. They need teachers and curricula which are relevant to the world in which they live rather than traditional academic disciplines. Often this means starting with specific applied courses rather than general education.

The Elderly:

Geographic access is a problem for the elderly, as is fear of crime when traveling alone. Educational and transportation technology, together with satellite teaching centers should be utilized to serve the educational needs of the elderly. Video cassette equipment is inexpensive and could be purchased, e.g., by nursing homes. Courses and programs taped at existing college studios and distributed through the mail would be an inexpensive way to reach this group. Similarly shuttle bus transporation to and from campus at night for a modest fee would increase access. Finally sending instructors and councelors to nursing homes would reach those confined.

Curricula and counseling for the elderly should focus on their expressed interest in recreational pursuits and skill training for part-time "cottage industry" employment.

Women:

The proposed Area Educational Opportunity Centers and Vouchers for low income, low previous education women will do much to increase access of women to continuing education. Efforts should be made to remove other barriers women face through adult day programs for women with children in school, day care facilities on campus for women with small children, and the use of broadcast technology to carry educational services into the home.

Area based planning to meet the educational needs of adult women is most appropriate. Women's alternatives and needs may vary considerably across the State. While the suburban housewife must be taught to assess realistically the possibilities and options in a job market she has not known for years, the urban disadvantaged woman must be given skills to advance in a job market which has discriminated against her in the past. Continuing education should be tailored to varying needs of varied groups. Adult day programs for women pioneered by Northeastern University in suburban locations have proven the utility of daytime continuing education courses to increase access of women with small children.

Other Clientele:

Continuous analysis of demand by the proposed SAPB's is suggested as the basis for area planning and for defining the specific needs of local clienteles. The changing needs of these varied clienteles must be assessed regularly and programs adjusted accordingly. It is precisely this responsiveness to varying adult needs that is essential if adults are to be given the educational services they should have. Programs and courses should vary in content from vocationally-oriented to recreationally-oriented and from basic skills to advanced state of the art. Formats should vary to suit the clients. Examples include morning classes for women with children, daytime classes for the elderly, intensive seminars and workshops and conferences for practicing professionals. In the latter category, the Northeastern University Center for Continuing Education should be noted as a model operation which has for many years conducted state of the art courses for the professions and technical industries in the Boston area. Often programs are run jointly with various professional societies. The Center has met a distinct need and met it well for many years. It is illustrative of the vitality and diversity of the alternative system.

Access to the Alternative System Instead of to Part-time Status in Full-time Programs

The services provided, therefore, should be much less homogeneous than those provided by the traditional full-time model of higher education. The diversity of background, abilities and motivations of adults is much greater than among the youth served by traditional full-time-day higher education. It is not possible to meet adult needs by simply opening regular day courses in the full-time program to adult part-time students. The whole educational philosophy and mode of operation of traditional full-time-day higher education is tailored to the needs of youth just out of high school. Massachusetts adults need and deserve an alternative education system geared to their needs. Further, adults usually prefer to study with other adults in nontraditional classroom settings.

It is for such reasons that it was recommended earlier that the locus for nearly all continuing and part-time study be a co-equal continuing, part-time, adult program, not the day full-time program. As full-time enrollments drop in the coming decade, there will be great institutional pressure from vested faculty and administration interests not to contract funding and operations. Putting more part-time students into the day full-time program on a full-time equivalent (FTE) funding basis will increasingly be seen as the answer. It is a basic contention of this report that such a approach would short-change adults who are better served by a flexible system uniquely designed to meet their need State subsidy to part-time and continuing education should not go to the traditional full-time programs but to students in strengthened continuing education divisions.

VI.E. Finance: Subsidizing Students Instead of Institutions

Major Recommendation:

The choice of a mechanism of support for adult continuing postsecondary education should be based on its effect on the operation of the system (i.e. one which will facilitate development of desired patterns of institutional and clientele response).

The Commonwealth should adopt financial policies and mechanisms responsive to the needs of special student clienteles and supportive of strong and independent continuing education programs. Those most in need of financial assistance should receive it in a manner which has the precision to effectively discriminate in their favor. Flat-rate low tuition lacks that precision since it effectively provides a scholarship or public subsidy to all students regardless of need. Clientele-specific cash vouchers are therefore the policy instrument of choice for targeting aid.

All State support (with the exception of the Service Area Planning Board Grants discussed below) for continuing and part-time postsecondary education should be provided to needy adult students in the form of vouchers and not to institutions.

The Commonwealth should, therefore, establish a Massachusetts Adult Continuing Education Voucher Program for low-income, low previous education adults to be operated through the Board of Higher (Postsecondary) Education. Recipients could take one or two continuing education courses per semester up to a specified limit. The vouchers should vary in amount from full to partial tuition as a function of increase in both the recipient's income and previous education. The vouchers should be tenderable at any postsecondary institution, provided the institution is a participating member of a Service Area Planning Board.

The level of funding of the ACEV's should be $2 million in FY 1975 and $4 million in FY 1976. The voucher should be $40 per credit hour or actual tuition, whichever is lower for the lowest income and previous education groups and become progressively lower for higher income and education levels within the eligible range.

A tax credit policy should be implemented such that employers receive a tax credit for one-half of the funds they expend for tuition or contract educational services at any postsecondary institution participating in a Service Area Planning Board.

The current programs of allowing veterans and certain teachers to attend classes tuition-free should be terminated on their present basis and be subsequently conducted as true voucher programs with a State cash appropriation and tenderable at either public, private or proprietary institutions.

The Commonwealth should initiate an SAPB Incentive Matching Grant Program to fund the establishment and operation of the proposed Service Area Planning Boards. The formula should be 75% State matching to 25% contributions from member institutions with an initial FY 1974 State appropriation of $300,000.

The self-supporting character of continuing education in the public institutions should be maintained, strengthened, and made more explicit so as to reduce the degree of arbitrary control over the use of continuing education revenue sometimes exercised by the day full-time college. An explicit overhead charge payable to the General Fund (or to a special trust fund to finance other Statewide continuing education expenditures) should be made.

Sole responsibility for fiscal management of the continuing education budget should rest with the Dean of Continuing Education on each campus, responsible in such financial matters directly to the President.

Changes in public policy should encourage operation on the basis of (a) a set of explicit cost accounting rules, (b) explicit payment for what are now indirectly subsidized overhead costs, (c) explicit new appropriations of institutional contingency funds for presidents to use in managing the overall institution (both full-time and adult-continuing divisions), (d) new explicit State subsidies to adult students in need in the form of vouchers, and (e) additional expenditures out of continuing education receipts for ancillary services for adult students and increased faculty salaries.

In order to raise the revenues to cover indirect overhead costs and for other complementary services and program activities on each campus, the tuition rate in public institutions should be raised to approximately $40 per credit hour.

Private institutions should adopt the total cost accounting approach suggested, and should examine individually the possibility of lowering somewhat the tuition rates they are now charging in part-time and continuing education while maintaining fiscal solvency.

Rationale and Sub-Recommendations:

General Considerations of State Support*

The premises underlying the recommendations in this section are several and are discussed here as background to the specific elaboration of the recommendations.

Historically there have been three arguments for public support of education: first, society benefits from higher educational levels of its citizens; second, there is a transfer of support by taxation from one generation to the next; third, low income populations should be preferentially subsidized in their pursuit of education. It is important to differentiate these arguments for some form of state support of education from the selection of the particular mechanisms of that support. The use of the term public support as used below is not limited to any particular form of support. Public policy regarding approved level of support should be distinguished from policy alternatives regarding mechanisms of support. Consider each of these issues in turn.

Who Benefits from Education: The first argument for public support to education is that society benefits from the education of its citizens.

---

*The material presented in the next few pages applies both to traditional full-time higher education and to continuing education, but it is of course the latter which is the focus of this discussion.

Benefits of education accrue to both the students involved and the society as a whole. The economic benefits are for the individual, better jobs and higher pay, and for the society, higher productivity of the economy as a whole. Society also benefits from a better-educated citizenry and students enrich their lives with social and learning experiences.

Benefits	Individual	Society
economic	better jobs higher pay	higher on-the-job productivity technological advances
social	experiences	better citizens
academic	learning	social criticism development of knowledge

Theoretically, students will decide how much education to take on the basis of equating the perceived benefits with the costs. Individuals will be unwilling to pay for education which benefits society but not themselves. If the decisions to enroll are left entirely to the individual involved, educational enrollments may be fewer than are in the public interest. As costs to students go down with increasing levels of public support, more people will decide to take more education. To the extent that the resulting social benefits are greater than the subsidies, public support is rational. Similarly, employers benefit from education and training of their employees. The employer's return on his investment in training is such that it is rational for him to subsidize education. Hence, 60% of men in continuing education in Massachusetts are receiving some form of employee subsidy. Further, since the student receives substantial personal benefits from education, it is appropriate for the total cost to be shared by the student. Rational public policy should set a level of support for postsecondary education which reflects the distribution of benefits between the individual or his employer (tuition) and the society at large (State support).

Intergenerational Transfers: The second argument for public support to education is as an intergenerational transfer of support. Working adults have the resources to pay taxes for education of young adults who have few resources on their own to pay the costs. When these students are older, however, they will pay the taxes to support the education of the next generation. Further, social policy on most subjects distinguishes between different clientele, often on the basis of age, with different policies for different age groups. Hence, differential State policies with regard to level and mode of support for youth-full-time-day higher education and ault-part-time-continuing postsecondary education are entirely appropriate. As argued elsewhere in this report, differential policies are desirable for a variety of other reasons having to do with the differing needs of these two population groups and the characteristics of educational institutions.

Subsidies to Low-income Populations: The third argument for public support is that education can be viewed as a right of all citizens. In principle, everyone should have the opportunity to attend if he wishes, regardless of his ability to pay for that education. Higher income taxpayers should support those who do not have the resources to attend.

There are three kinds of criteria in taxing citizens for public services. First, individuals should be taxed according to their ability to pay. Thus, higher-income individuals should be taxed more than lower-income individuals. Second, individuals at the same income levels should pay the same level of taxes for services. These principles should apply in the process of taxing the public for the support of education and in the pricing of educational services. Third, the ratio of user charges to general support for services should reflect the ratio of benefits derived by the individual and by the society.

Continuing Education: How do these arguments for public support apply to the specific area of continuing education? Although some individuals are in continuing education for reasons of general interest, the majority are there for job-related reasons. The benefits, both personal and social, are thus primarily economic. Students later get higher incomes and better jobs and the economy benefits. The benefits of development of knowledge, social criticism, and better citizenry are less important in the area of continuing education than in full-time education in traditional academic settings. For this reason, it is justifiable to have a lower level of direct public support for continuing education than for full-time education.

Because most students in continuing education are working adults, the issue of intergenerational transfer of funds is altered. In fact, the transfer is between one set of adults and another, not between generations.

Finally, because the bulk of current continuing education students in Massachusetts is in the middle class and upper middle class, as measured on either income or job status scales, the issue of subsidization of lower income groups is altered. Middle and upper-middle class adult students need not be subsidized; however, the case is clear for subsidization of lower income groups.

What is the equitable structure of public support for continuing education? In terms of horizontal equity: citizens at one income level should not be paying for the continuing education of individuals at the same income level. In terms of vertical equity, individuals should be paying for continuing education according to their ability to pay: the low income taxpayers should not be subsidizing higher income students as is now the case through the indirect subsidy received by continuing education in public institutions.

These criteria can be used to articulate a policy that continuing education should be paid for by the individuals who benefit from it according to their ability to pay. Middle income adults should not receive subsidies from the general taxpayer when they can afford to pay for the course and will receive income benefits from taking the course in the future. The lower income student, however, should be subsidized; he is not able to pay, but he and society will benefit in the long run from his education.

Who should subsidize the low income student? There are two alternatives: one, other continuing education students through paying higher fees, and, two, the general taxpayer through general state revenues. The former is the current situation of subsidy to teachers and veterans who do not pay a tuition fee under certain conditions. Other students must pay higher fees to support the class at an expanded enrollment level. The latter policy, subsidy to special groups selected consistent with social policy objectives and out of general tax revenues, is more appropriate as a general policy. (Note that while higher public tuitions are justified in continuing education elsewhere in this section, that justification is on grounds of (a) educational costs, principally making explicit the indirect subsidy now received by public institutions, (b) the educational advantages, principally flexibility and responsiveness, of a self-supporting continuing education, and (c) the ability to pay of the class of students and employers who are now using the system). The suggested subsidy to special elientele groups is justified by social policy considerations and should be derived from general revenues.

Alternative Mechanisms of Support to Continuing Education

Once the value of subsidizing education and the general principle of subsidizing low income or other underserved students (but not those who can afford to pay) has been determined, the appropriate mechanism of support must be selected. Structures of subsidies should be developed on the basis of their likely effects on both students and institutions.

Demand vs. Supply Subsidization: The basic choice in public policy for support of postsecondary education is to subsidize institutions (supply) or students (demand).

Public financial support in higher education has traditionally gone to the supply side, generally only to public institutions. State contracts with private institutions and other more direct forms of state aid are beginning to blur this pattern.

Institutional subsidization was appropriate when the objective was to build new institutions, to expand the base of providers of higher education services. It was so important to stimulate the system to provide more spaces for students that this mechanism was employed even though it was sometimes regressive. Lower income taxpayers on the average subsidized through taxes the higher education of children of middle and upper middle income families attending public institutions. While progressive income tax rates reduce this effect, the participation rates of higher income children in higher education are so much greater than for lower income children that progressive taxation schedules are overwhelmed.

Today the public policy objective in Massachusetts postsecondary education is no longer building new sectors and institutions--it is maximizing the diversity, balance, efficiency and responsiveness to social needs of the total postsecondary institutional universe. For this objective student (demand) subsidization is more appropriate. Demand subsidization through vouchers to students has advantages which make it especially appropriate in continuing adult postsecondary education in Massachusetts in 1973.

First, demand subsidies are far more precise than supply subsidies in targeting aid specifically on population groups in need. While institutional subsidies currently lead to lower tuition prices for all students in the public sector regardless of their personal resources, demand or student subsidies only go to those in need. Those who can afford to pay are charged tuitions closer to true cost.

Second, demand subsidies promote competition between institutions on grounds of educational quality rather than price. Supply subsidies to public institutions keep public tuition charges artificially low and student's choices are dominated by issues of price rather than program scope or level of teaching. As the Carnegie Commission on Higher Education recently noted, "The competition between public and private institutions is now too heavily based on price considerations alone...both systems would benefit if the competition were based more on quality". The Commission was referring to full-time higher education, but the comment also applies to the severe competition now prevalent between public and private continuing education programs in Massachusetts. The College Entrance Examination Board and the Committee for Economic Development have drawn similar conclusions.[13]

Third, vouchers, by giving the student direct purchasing power, foster responsiveness on the part of education institutions to students' needs. While complete consumer determination of what educational services are provided is inappropriate, traditional supply subsidization has not led to the degree of responsiveness and accountability needed. The fact that continuing education in Massachusetts has been more responsive to student needs than full-time programs may be explained by the fact that continuing education is financially self-supporting and dependent on maintaining student enrollments.

Fourth, public policy decisions regarding high or low subsidy should be by type of clientele and area of study, both of which can be clearly related to public needs rather than by type of institution. Differential subsidy decisions should be made on the basis of output criteria (e.g., a low income person educated or a new doctor) and not on the basis of legal differences in organization from between otherwise barely distinguishable institutions.

Fifth, subsidizing demand rather than supply in adult continuing education is most likely to encourage cooperation, efficiency, maximization of responsiveness, breadth of service, and use of the entire range of postsecondary educational resources.

Direct (Explicit) vs. Indirect (Hidden) Subsidies: Whatever form of public subsidy is employed, that subsidy should be explicit, and reflect total accurate costing of all elements of subsidy received. Present modes of financing continuing education are laced through with indirect institutional subsidies, rather more so in the public than private sectors. The premises underlying the financial management and tuition recommendations made in this report are that there are many advantages to a self-supporting system, that such a system should operate on a true total cost basis with any subsidies made explicit, and that there should be a rational linking of tuition charges to true total costs.

Vouchers for Special Clientele Groups

The Commonwealth should adopt financial policies and mechanisms responsive to the needs of special student clienteles and supportive of strong and independent continuing education programs in public and private postsecondary education institutions. Those most in need of financial assistance should receive it in a manner which has the precision to effectively discriminate in their favor. Flat-rate low tuition lacks that precision since it effectively provides a scholarship or public subsidy to all students regardless of need. Clientele-specific cash vouchers are therefore the policy instrument of choice.

The Commonwealth has an obligation to assist certain segments of the adult population in meeting the cost of part-time postsecondary education. The Commonwealth should establish a cash voucher program for selected adult clientele. Those Massachusetts Adult Continuing Education Vouchers should be designed such that recipients can take one or two continuing education courses per semester up to a total of thirty-two courses, the equivalent four years of college or Bachelor's Degree, whichever comes first. The vouchers should vary in amount from partial to full tuition as a function of both the recipients' income and previous education. The target clienteles for the vouchers should be low-income, low-previous-education adults of all ages. The higher one's income (and assets) or previous education within the decided range, the lower the per course voucher. The vouchers should be tenderable at any postsecondary institution, provided the institution is a participating member of a Service Area Planning Board.

The crucial elements should be these: (a) that the aid should be in the form of cash course vouchers to students tenderable at any public, private or proprietary postsecondary educational institution which is a participating member of the proposed Service Area Planning Boards (licensing requirements assumed); (b) that the size of the voucher should be a function of both income and previous education; (c) that it is those adults of low income amd low previous educational attainment who should be subsudized most; and (d) that adults, not traditional college age youth, be eligible.

This approach will in effect create a sliding scale tuition with those of lowest income and least previous education paying the lowest tuition rate and ranging to those with middle or higher income who will pay full tuition and receive no subsidy. For any given income level in the eligible range, those with least previous education should receive more than those with some previous college. Similarly, for any given educational background (eg., high school diploma), those of lower income will receive greater subsidy than those of higher income.

The exact specification of what the eligible range of education and income levels should be is properly a subject of public debate in the Executive and Legislative offices of Massachusetts government. There are public programs nationally and in states and cities which use various levels, and the particular decision is one properly made in the forum of public debate. Similarly, the minimum eligible age is a subject proper for public debate and decision.

Regarding determination of eligibility, it is suggested that the need assessment formulas used by national scholarship programs be examined since these formulas assess financial need by examining both income and assets. Similarly, the mode of operation of the federal government's Basic Opportunity Grant Program should be reviewed before final policies are adopted.

Another option advocated by some is State funding of part-time and continuing education through an institutional subsidy on a FTE (Full-time Equivalent) basis in the public institutions only. It is argued that such an approach will increase access to those of lower income. At the present time, however, private continuing education tuitions are two or three times as great as public tuitions, and yet the socioeconomic character of the students in each sector is virtually identical. There is little evidence to suggest that a further reduction in the tuition rate at public institutions to half of its present rate through FTE funding would bring in substantial numbers of low income disadvantaged adults. To the contrary, it would be a quite cost ineffective way to reach and attract underserved poor clientele. Low tuition rates are a device which in fact provide scholarships to everyone regardless of need and do not specifically target on the poor. Furthermore, flat-rate low tuition in public continuing education in Massachusetts would be a very expensive proposition, requiring substantial state expenditures, much of which would result in subsidy to well-educated, middle and upper middle income adults. Moreover, such institutional finding would exacerbate the price competition between public and private institutions, as noted earlier with a long-run detrimental effect on the system as private institutions are forced to close their programs.

The merits and demerits of vouchers for financing full-time higher education are beyond the scope of this Study. The point should be made, however, that the two systems are not tied. The clientele served and the educational model involved are significantly different and may justify supply subsidization (in the eyes of some) of full-time higher education. In the case of adult continuing education, the case for precisely subsidizing needy adults and giving them the choice as to how and where to use their subsidy is compelling.

The creation and funding of the proposed Adult Continuing Education Vouchers (ACEV) for special clientele is made more essential by the policies of existing federal and State student aid programs (Economic Opportunity Grant, National Defense Student Loan, College Work Study, Basic Opportunity Grant, and Massachusetts Higher Education Loan Program), all of which exclude students who are taking less than half-time study. Thus few adults can receive aid from these programs.

The ACEV program should be operated through the Board of Higher Education (or the proposed Board of Postsecondary Education) in the following manner: the program eligibility criteria should be widely published in local newspapers, etc.; any eligible adult could then apply; and the vouchers would then be awarded on a first come-first served basis up to the limit of appropriated funds for that year.

When the proposed Service Area Planning Boards have operational Educational Opportunity Centers as recommended elsewhere in this report, much of the application process should be handled through the Centers, with the BHE overseeing the entire program. Given the confidentiality of information provided, appropriate procedures should be established. Other State efforts (e.g., financial aid programs or income tax) can provide models and advice on such matters. The simplest and lowest cost approach to administering the voucher program is through the mail. Rather than verification of data provided in each case, the authorizing legislation should provide penalties for misrepresentation, and a random audit of 5% of applications should be performed by asking the recipients to verify their data. For reasons of equity elaborated earlier, general State revenues should be the source of State funds for the ACEV's.

Critics of vouchers are fond of claiming that while vouchers are a good idea in theory, they are administratively unworkable or at least cumbersome. This is a specious argument for several reasons. First, there are ways the voucher program can be designed (as discussed above) so that a minimum of bureaucracy and red-tape will be required. Second, the alternative of institutional funding has demonstrated its requirement for large administrative staffs to plan, operate and monitor individual institutions and systems. Third, we have had experience with near-voucher type programs in this country (e.g., the G.I. Bill and the Law Enforcement Education Program and employer guarantees of tuition reimbursement to employees) on a national scale, and they have functioned remarkably well and smoothly in achieving these specific objectives. The critics should be heeded, however, in the care with which the ACEV program is designed so that it too will prove to be a model of public administrative efficiency.

The recommended voucher size is $40.00 per credit hour or $120.00 per 3-credit course per semester. This amount should be the maximum and is predicated on the raise in public tuitions suggested below. The voucher should be $40.00 per credit hour or actual tuition, whichever is lower for the lowest income and previous education group and become progressively lower for higher income and education levels within the eligible range.

The level of funding of the ACEV's should be $2 million in FY 1975 and $4 million in FY 1976. Thereafter, the level should be determined by demand and state resources. If an average voucher award in the range of $100 is contemplated per semester for two semesters/year, 10,000 adults of low income and low previous educational attainment can be served in the first year. For 10,000 citizens of Massachusetts this would mean a second chance to obtain education -- the second chance they want and need, but cannot afford on their own.

The effect of the voucher program would be to encourage new clienteles into the system, without driving any current students out of the system. Although cost inhibits many adults from attending continuing education programs, it is not generally a problem for those currently enrolled.

It is appropriate here to restate certain findings of the survey of continuing education students in Massachusetts performed in this Study. It is clear that the group usually being served by continuing education is middle and upper middle class. Those who are poor, old or of low previous education are not being well-served. This is true of men and women, but more so for women. (See a specific comparison of occupation, income, previous education and age in the discussion of Access.)

The fact that continuing education currently serves individuals who are already high on social status scales means it is acting to widen the distribution of income within the State rather than to provide opportunities for low income people or equalize it. Instead of serving to upgrade the employability of the disadvantaged and unskilled, it is increasing the already high potential of people in the middle and upper middle class. The income gaps among these groups grow as a result.

It is important that continuing education programs be more open to citizens regardless of educational background. Adult education should be designed to provide a "second chance" for those people past the college age who can benefit from programs. Increasing financial access to programs through a voucher program is of primary importance in equalizing opportunity.

For those in the system, cost was not a determining factor in their decision to pursue additional study.

Of those currently being served, 60% of men and 24% of women are being subsidized by their employer. A sizeable majority of students indicate that they would take the course they are taking even if the tuition were higher. This fact is borne out by the fact that although public tuitions are roughly 1/2 to 1/3 private tuitions, the composition of the student clientele is identical in each case.

Although they are willing to pay more, they are able to recognize a bargain, and when identical programs and courses are offered by public or private institutions in the same service area, students are drawn to the lower cost public institution. Hence, while total demand among the group now served appears to be inelastic, the choice between competing institutions is highly price elastic. That is, that for those types of students now in continuing education programs, the decision to take a given subject is not affected much by price in the existing range ($60-$200 per course). However, when two geographically proximate institutions are offering the same course at two different prices, the consumer is likely to select the lower-cost course.

However, for adults with low income and small assets, the demand is highly price elastic. Thus, even current tuition levels are sufficiently high so as to constitute a barrier to participation. That barrier, together with other barriers discussed elsewhere account for the low participation rates among these groups.

Social policy must therefore provide the means to remove this financial barrier. To implement that social policy by the instrument of flat-rate low tuition through institutional subsidies is a crude tool at best, for it subsidizes equally the low and the high income adult. The appropriate instrument is the clientele specific voucher because it is precise in targeting aid, and because it provides an advance guarantee of aid at the point when a low income person is making a decision to resume his education and is therefore likely to affect his decision.

Another source of support for adults in need could be employers. Thus, a tax credit policy should be implemented such that employers receive a tax credit for funds expended for tuition or contract educational services at any postsecondary institution participating in a Service Area Planning Board. Such a tax credit is desirable from another perspective. It will encourage closer ties between employers and continuing education institutions. A limited tax credit scheme passed the Legislature in 1973(House 7056). It is a good beginning but it should be substantially broadened.

The reason a tax credit is justifiable on social policy grounds is that continuing education can be viewed as an investment which will yield a stream of benefits to the employer, the student (employee) and to the Commonwealth. The benefits to the employer (higher productivity of his employee) justify his expenditure; the employer gives as a fringe benefit the benefits which accrue to the student; and the State benefits from the contribution to economic growth and corporate and individual income which stems from the increased productivity. Thus a sharing of cost between employer and the State is appropriate.

Two existing State voucher programs must be noted in any discussion of student aid. The so called "teacher-vouchers" and "veteran-vouchers" are really not vouchers at all for they carry no money attached to them. Nevertheless, they set an important precedent for the use of specific-clientele-group vouchers in Massachusetts, a precedent applicable to other groups (e.g., low-income disadvantaged as recommended).

The problem with the present veterans vouchers is that as voted by the Legislature they entitle a veteran to take continuing education courses free at public institutions subject to the approval of the institutional governing boards. However, the "veterans vouchers" cannot be redeemed by an accepting institution for cash from the State. Thus, they really are not vouchers at all from the point of view of education finance theory, or from the perspective of a budget conscious continuing education administrator. What happens is that veterans are enrolled in classes which still have to break-even on the tuitions of other students, and hence classes are larger than would otherwise be the case, and support expenditures for the classes are less per student. In effect the "veterans voucher" entitles the veteran to a free but diluted course and education.

Because of this factor of dilution of educational quality, and because of the problems of the occupying of class slots by non-paying students when they could be occupied by cash-paying customers, the Board of Regional Community Colleges has exercised its right to refuse acceptance of veterans vouchers at the community colleges. The Board of Trustees of State Colleges has not yet made the same decision, but some pressures exist to do so.

A solution is for the Legislature to make the veterans vouchers truly vouchers which carry a cash value. This would require a specific appropriation. If that were done, the vouchers could also be made useable at private institutions and at proprietary and independent schools.

The second major voucher plan in operation is the State College System "teacher voucher". In return for school system teachers supervising State College day students in student teaching, the College grants them a non-specific "teacher voucher" entitling the teachers to a free course in continuing education at any State College. Exactly the same problems of revenue loss and dilution of educational quality as described above for the "veterans vouchers" apply, and there is considerable sentiment in the State College System against the teacher vouchers in their present form (i.e., without their being redeemable in cash by the recipient institution). The solution here too is for the Legislature to make them truly vouchers with a cash value. If student teacher supervisors have to be paid, then they should be paid as a direct cost of operation of the day programs at the Colleges and appear as a line item in the budget of the day College. The present arrangement means that cash paying students in continuing education have to absorb an expense of the day college by having their classes diluted in quality due to resource constraints.

Because of these weaknesses, the current program of allowing veterans and certain teachers to attend classes tuition-free should be terminated on their present basis and be subsequently conducted as true voucher programs with state cash appropriation. The cash vouchers should be tendable at either a public, private or proprietary institution. The principle of vouchers for veterans, and certain teachers who have provided in-service training guidance to a student from a Massachusetts public institution are not inherently unreasonable. However, the present system of offering a "voucher" without appropriating any money for it is a disservice to the intended recipient of the voucher.

Consider a veteran who is told by an act of the Massachusetts legislature that he has an entitlement to free courses in continuing education. He first finds that if he tries to use that entitlement at a community college, he will not be accepted for the Board of Regional Community Colleges has decided not to accept veterans on a no-tuition basis (this is a right each board has within the law). In the State college system, he finds that he can indeed take courses on a no-payment basis, but what he does not realize is that that entitlement causes an increase in the student-faculty ratio in classes to accomodate for the number of tuition-free veterans. Both he and the paying students in the class are receiving less in the way of attention and individualized instruction than they would have obtained in that same class had all the students been paying on a cash basis.

The existing Federal Law Enforcement Education Program vouchers provide an excellent demonstration of the responsiveness of the continuing education system to specific clientele vouchers. The availability of these vouchers for law enforcement personnel has led many institutions to respond to the need and create law enforcement education degree and non-degree programs. The program is a striking demonstration of the advantages of demand versus supply subsidization. It was not until this demand subsidy became available that most institutions (there are some commendable exceptions) seriously considered instituting criminal justice and law enforcement programs.

Funding the Service Area Planning Boards

The Commonwealth should initiate an SAPB Incentive Matching Grant Program to fund the establishment and operation of the proposed Service Area Planning Boards. The formula should be 75% State matching to 25% member institution contributions. Each institution should contribute to its Area Board in proportion to its share of the total continuing education enrollment in the area. The grant program should be administered through the Board of Higher Education and be based on annual applications. The initial minimum State funding should be $300,000 in VY 1974 and $500,000 in FY 1975.

Additional sources of funds for special projects the SAPB's might tap are the Title I H.E.A. federal grant funds administered by the Board of Higher Education, and education special revenue sharing funds if they become available. Also, the SAPB's could well apply for contributions from foundations for innovative projects.

Institutional Costs and Indirect Subsidies of Continuing Education in Public Institutions

The self-supporting financial basis of continuing education in the public institutions should be maintained, strengthened and be made more explicit so as to reduce the degree of arbitrary control over the use of continuing education revenue sometimes exercised by the day full-time college. An explicit overhead charge payable to the General Fund or to a special trust fund to finance other Statewide continuing education expenditures should be made. This cost would be predictable and the present pattern will be ended in which Deans and Directors of continuing education are often unable to budget because of uncertainty with respect to charges that will be made by the day division.

Under present law, part-time and continuing postsecondary education in the the degree-granting two- and four-year public institutions in Massachusetts is to be conducted "at no cost to the Commonwealth". That phrase has been subject to varied interpretations over time and at different institutions. For example, recently the legislature passed a bill requiring the part-time divisions of the State colleges to pay a certain sum of rent for use of the day college facilities. In the case of the community colleges, no explicit rent is charged, but approximately 20% of the gross revenues collected by the evening divisions on the average is paid to the day school operation to be used for a variety of purposes. In the case of U. Mass., a trust fund model is employed which leaves all continuing education earnings in a fund which is under the direction of the director of continuing education, and some funds are used for day school purposes.

Consistent with the basic premise of this report - that part-time and continuing post-secondary education be given equal status to the full-time education - explicit overhead charges should be made and sole responsibility for fiscal management of the continuing education budget rest with the Dean of Continuing Education on each campus, responsible in such financial matters directly to the President. True financial self-sufficiency of continuing education is needed if autonomy from control by the day-college program is to be achieved.

Presently financial management of continuing education in public institutions is rather *ad hoc*. In private institutions (except the large ones) the situation is not much better. Little budgeting is done in advance and while it is understood that a "surplus" generated will go to the day division, these charges are not made explicit. They often remain unknown to the Dean or Director of Continuing Education.

The "surplus" is taken by the day division to be used for a variety of purposes. While this is entirely appropriate in principle, the problem at present is that the charges are not assessed and levied by any rational system or procedure. Arbitrary skimming by day colleges of between 10% to 35% of total continuing education services indicates unsystematic planning and management, making a self-supporting program far riskier than it need be, and severly compromising its autonomy. Moreover, the cash "surpluses" are not true surpluses at all since indirect subsidies are not calculated as part of total cost, and since needed services (such as counseling, placement, etc.) are sacrificed to insure a "surplus".

Continuing education is now operated with hidden institutional subsidies, and with a set of incentives on each campus which (1) encourages the sacrificing of expenditures on ancillary services for adult students so as to generate a cash "surplus" from the adult continuing education program to be used as a president's contingency fund for general institutional needs, (2) subjugates continuing education to financial uncertainty and second-class educational status, (3) permits suspicions about the uses of "surplus" funds, and (4) indirectly and non-explicitly subsidizes continuing education programs in public institutions when that subsidy effectively goes not to poor and low education adults (since they now have low participation rates in continuing education) but to adults of higher income, occupation and educational levels.

It would be far wiser for public policy to encourage operation on the basis of (a) a set of explicit cost accounting rules, (b) explicit payment for what are now indirectly subsidized overhead costs, (c) explicit new appropriations of institutional contingency funds for presidents to use in managing the overall institution (both full-time and adult-continuing divisions), (d) new explicit State subsidies to adult students in need in the form of vouchers and (e) additional expenditures out of continuing education receipts for ancillary services for adult students in each continuing education program.

Each of these items a, b, c, d, and e is legitimate and justifiable in its own right based on public policy objectives. The problem with the existing arrangement is that it confuses these five separable aspects of the financial structure, thus creating incentives which work at cross purposes to each other and to public policy goals.

The indirect subsidy has two components as described in Section IV.B.2 of this report: the cash component and the equivalent value component. In the case of the public institutions, the continuing education programs receive an indirect subsidy from the State in the form of free space, free support services, etc. Sometimes the subsidy is direct, as in the form of some continuing education administrative personnel salaries paid out of day faculty slots. Recently the Massachusetts Legislature has been the prime force attempting to rationalize the financial structure by requiring in some institutions (yet not all) cash payments from the continuing education divisions for indirect subsidies received (e.g., rent) and putting an end to use of day faculty slots to carry continuing education personnel in the State College System, but the practice still remains in the Community College System. Since the current law states that continuing education is to be truly self-supporting, greater rationalization of the system would appear to be appropriate.

In the case of U./Mass.-Boston and Lowell State the public subsidy pattern becomes further confused since neither school formally has a continuing education division. Both have consciously developed an extended day program which offers courses and part-time study opportunities identical to continuing education programs in other schools. Thus in these two public institutions "continuing education" by another name can be viewed as a funded activity.

Excluding U./Mass.-Boston and Lowell State College and considering all the continuing education and evening division operations in public institutions in Massachusetts, it is estimated that the indirect subsidy received from the State through the parent institutions is such that gross revenues should be at least 1.3 times their present level if the operation Statewide were to be truly self-supporting on a total cost basis. Thus the annual indirect subsidy is at least $1.5 million and probably closer to $2 million when U./Mass.-Boston and Lowell State are included (Note that these figures are conservative figures since only the prorated 1/3-day equivalent value of space used has been calculated. If library, parking, apportioning of central administrative costs, etc. in accordance with standard cost-accounting principles are included, the subsidy figure can easily be calculated at over $2.5 million annual operating subsidy.) How such a subsidy arises is explained below:

There are as many different ways of "costing" continuing education programs as there are programs. Items which are continuing education cash expenditures at one institution are an unbudgeted and non-explicit indirect subsidy at another. It is clear that the lack of "true total cost" approach to financial management makes comparisons of costs between institutions impossible. Further, so-called "surpluses" cannot be compared. Finally, rational connection of financial cost factors to pricing and tuition and to needed scholarship aid (the appropriate connection between price and clientele composition) cannot be made.

Thus, the present modes and practices of financial management (especially cost-accounting, pricing and scholarship aid), are tolerable within each institution only because of the generally off-hand way continuing education programs are administered (discussion of the administrative problems of continuing education appears elsewhere in this report). Administrative modes and financial management practices are both a product of and a contributing factor to the "second class status" most continuing education programs hold in comparison to the regular day programs of given institutions. It is notable that at those institutions where continuing and part-time study do not hold a subordinate status but are part of the major mission of the institution (Northeastern University, Suffolk University, and Western New England College, to mention just three illustrations) both administrative and financial management practices are much better.

From the perspective of this report - namely that part-time and continuing adult postsecondary education should be of equal stature and value as the traditional youth-day model - such off hand and imprecise administrative and financial practices are intolerable. Hence the recommendations made herein.

One basis for the analysis leading to those recommendations is the approach to uniform "total-cost" accounting and budgeting outlined below which is suggested as an appropriate way to rationalize financial management in continuing education. Given the fact that the inputs to a typical continuing education program are the same (space, faculty, advertising, etc.) regardless of institution (public or private), that the true costs for these inputs are roughly the same for everyone, and that the basic production process (educational production function) used by all institutions is roughly the same, it is safe to assume that the true total costs or "real unit costs" are the same for all programs with minor variations. The apparent difference in financial structures and costs between programs is largely an artifact of the different accounting and financial management philosophies and practices employed and the components of direct and indirect (explicit and implicit) subsidy received. The difference is one of cash costs of a defined administrative unit vs. true, total costs of the operation.

Thus the applicable equation is:

$$\left[\begin{array}{l}\text{Total}\\ \text{True}\\ \text{Cost}\end{array}\right] = \left[\begin{array}{l}\text{Total cash}\\ \text{expenditures in}\\ \text{continuing education}\\ \text{from continuing}\\ \text{education}\\ \text{"budgeted" expenses}\end{array}\right] + \left[\begin{array}{l}\text{Total}\\ \text{expenditures on}\\ \text{continuing}\\ \text{education from}\\ \text{the continuing}\\ \text{education "budget}\\ \text{surplus"}\end{array}\right] + \left[\begin{array}{l}\text{Total}\\ \text{"expenditures"}\\ \text{on continuing}\\ \text{education from}\\ \text{indirect}\\ \text{subsidy receive}\\ \text{from parent}\\ \text{institution}\end{array}\right]$$

or, $TTC = TCE + TES + TEIS$

The cash operating cost at each institution, therefore, depends on what is directly charged and what is indirect subsidy in each case. The problems with present financial management patterns stem from the fact that the equation which usually is used is:

Partial (visible) Cost = TCE + TES

wherein the dollar value of the indirect subsidy is ignored.

Because of the widespread variation in accounting practices and the unavailability of data, only an approximate financial model and estimates of a hidden subsidy are possible. For example, a $20,000 "surplus" generated by a continuing education division at one school and paid to the parent institution may not actually be a contribution to overhead expenses at all if the continuing education director's salary is paid out of a day faculty slot. The same $20,000 "surplus" at another institution may be a genuine contribution to certain overhead expenses such as light, heat, maintenance, library, guards, snowplowing, telephone, etc.

Thus while many institutions show a "surplus" which is ostensibly an overhead reimbursement contribution to the parent institution, it may not be that at all. When considering averages of all public institutions, and being generous by estimating that the 0-35% "surplus" implies a genuine average figure of 10% of revenues as an actual overhead contribution (i.e. not salary repayments), and if one further assumes that all operating overhead (cash subsidy) expenses are thereby reimbursed, then one is still left with the minimum hidden (equivalent value) subsidy of the value of free space. Comparison to a private institution which often must amortize the depreciation of physical plant and pay mortgage interest, or a private college which rents space for a branch campus makes the subsidy apparent.

It is this hidden subsidy which can be approximated for a program of approximately 2,000 course registrations in a public institution with gross revenues in the vicinity of $130,000 - $140,000, as being approximately $40,000. Hence to be self-supporting on a true total cost basis the total revenues would have to be at least 1.3 times their current level. Even in branch campuses, public schools allow public colleges to use space nearly free while private colleges are asked to pay rent.

The implications of this are considerable. If, for example, an operation is to be truly self-supporting, then it should recover and repay the indirect subsidy. This means higher tuition charges. If on the other hand, a subsidy is decided upon as a matter of policy, then that subsidy ought to be explicit, and the option of providing it directly to students rather than to divisions of continuing education indirectly ought to be explored. (Direct student voucher subsidies are recommended elsewhere in this report.)

Given the above changes in financial management and structure, more money is needed to run continuing education programs in the public sector. Additional money is needed for staff, for supportive services such as counseling and for outreach, and so on. The funds needed for such services should be obtained from tuition increases since student clientele data clearly shows those now in the system can afford to and are willing to pay more. Further, some of the additional money raised through increased tuition can be used for innovative projects by each individual institution.

Raising Public Tuitions in Continuing Education

In order to raise the revenues to cover indirect overhead costs of continuing education and for other complementary services and program activities for adults on each campus, the tuition rate in public institution continuing education programs should be raised to approximately $40 per credit hour. Such a raise, given the characteristics of the current clientele in continuing education, discussed in the section on the proposed specific adult continuing education vouchers earlier, will not deter many of the current participants. The vast majority of the current participants are from income levels where they can afford tuition rates at that level. Moreover, per capita incomes have and are increasing faster than continuing education tuitions.

The action of raising tuitions, adopting true total cost accounting, and spending more on ancillary services for adults can be taken by the Segmental Boards. The proposed new Voucher program to reach those not now being served requires legislative action.

Benefits of Higher Tuitions and Total Cost Accounting

Increased revenues through higher tuition prices, reflecting true costs of continuing education, would make continuing education more genuinely autonomous -- divisions of continuing education could pay their own way *vis-a-vis* the regular programs, a state of affairs which would be welcomed by most Directors of Continuing Education and most presidents and would make more likely the availability of State funding for other purposes suggested earlier. The current pattern of hidden overhead subsidy in public institutions is not benefitting those population groups most in need, namely those adults who are poor and who have low previous education. Further, it is not providing cash funds at each institution for other activities such as counseling, area planning, institutional scholarships, placement services, etc..

There are additional benefits to the financial management structure proposed and to the raising of the public tuition levels. First, the additional revenues will permit the paying of higher faculty salaries in the public institutions, and those salaries should be increased approximately 20% over their current level.

Secondly, with public tuitions raised to an appropriate level, and with overhead charges levied such that the operations in the public institutions are truly self-supporting at full cost, the problem of price competition between public and private institutions will be alleviated. With both publics and privates operating on a full-cost basis, with comparable tuition, healthy competition can ensue centered around program quality, innovation, and service characteristics. A uniform tuition rate between publics and privates is under discussion among the members of the Worcester Consortium with particular reference to their proposed external degree. This is a very promising development in the direction of a more constructively competitive institutional environment.

Thirdly, if evening programs were funded like day programs in public institutions, they would become subject to the same pressures for tenure and unionization as the day programs. A key case is pending at Massasoit Community College on the issue of whether or not continuing education faculty are state employees. If they are deemed to be state employees, then they can be unionized just like the day faculty. If that occurs, substantial pressures will be experienced by the evening division to conform increasingly to day practices with respect to use of faculty. This would be very unfortunate in view of the fact that one of the most desirable characteristics of continuing education is its flexible faculty arrangements with faculty hired from various sources on a contract, performance-based basis. It should be noted that already at the public institutions where unions exist, it is usually written into the contract that the day faculty at the institution have the right of first refusal in teaching any course which is offered in continuing education. This is undesirable for it perpetuates the historical subordination of adult postsecondary education to the full-time day programs designed for college age youth and full-time faculty.

Finances at Private Institutions

The use of part-time and continuing education as a vehicle for a "living endowment" in many private institutions has been alluded to earlier. The importance of this in the financial structure of many private institutions is striking. Many private institutions in Massachusetts could not survive without it. Private institutions should adopt the total cost accounting approach suggested earlier, and should examine individually the possibility of lowering somewhat the tuition rates they are now charging in part-time and continuing education while maintaining financial solvency. Careful examination by each institution might yield opportunities for cost savings and consequent reductions in the tuition charges. This is particularly true if tighter planning, costing, and management procedures are adopted as has been recommended in the institutional costs discussion earlier. More precise cost accounting of this kind would no doubt aid private institutions in their overall financial management in the financially tight 1970's.

VI.F. Full Partnership: Institutions of the "Core" and the "Periphery"

Major Recommendations:

To best meet adult continuing needs a new partnership must be formed among all the postsecondary education providers in a given area including public and private degree-granting institutions, proprietary institutions, public regional vocational-technical schools, private adult education centers, school system adult education programs and certain employer-based education programs. This partnership should be formed through the proposed Service Area Planning Boards (SAPB's) on which all the providers of continuing postsecondary education within an area would be represented. Coordinated planning should be undertaken to maximize service and minimize duplication. All providers who are SAPB members should be eligible for the proposed Adult Continuing Education Vouchers (ACEV's). The time has come to view postsecondary education in terms of its educational output regardless of the type of institution or structure involved.

Rationale and Sub-Recommendations

One of the persistent problems in Massachusetts postsecondary education is that there has been little communication between the several sectors which comprise it. This has been even more the case for continuing and part-time education than for the full-time day operations. Public and private degree granting institutions in the same area rarely communicate much less coordinate their plans and efforts. For example, programs have been initiated at public institutions in several cases which are duplicative of those already being offered by nearby private institutions. Without consulting and attempting to coordinate with the existing programs, declining enrollments in nearby privates usually follow. Similarly the communication and coordination between the public regional vocational-technical schools' postsecondary programs and degree-granting institutions has been limited. Communication and coordination with proprietaries has been virtually non-existent as public and private degree-granting institutions and the public regional vocational schools planned their own growth. Several reputable proprietary institutions have been forced to close. Yet in cases where public schools contracted for services from existing proprietaries a viable relationship was established. School system adult education programs and private adult education centers have also seldom been involved as the noncredit community service programs of public institutions have been planned and implemented.

From the point of view of an adult seeking continuing postsecondary education such distinctions between provider sectors within the postsecondary universe are nearly irrelevant. Much more important to him are questions of the nature and quality of service provided (e.g., the location of course offerings, time of day, subject, format, cost). Thus the typical resident of a typical geographic service area who is interested in enrolling in a course or program will look into the offerings of institutions and schools nearby and then make a selection. Institutions in each area should also together examine their joint offerings from the consumer's point of view. The proposed Service Area Planning Boards provide a mechanism for such discussion.

In many cases these several sectors are providing the same service and the traditional sectoral distinctions become blurred. Adult students have recognized this long before traditional educators who cling to sectoral distinctions based on source of funds, financial structure, nature of faculty, etc. Such input distinctions have little relation to the "production process" or "technology" of each sector, much less its "output" effect on students.

Moreover, evidence is accumulating that the quality of education in many instances may be superior and the cost less (total cost) in proprietary schools and vocational-technical schools than in traditional colleges and universities. A study of proprietary schools in the San Francisco Bay area has verified the high quality of offerings in the proprietary programs compared to those in the core of traditional community colleges.[14] Proprietary business schools have more than double the student completion rates than the business programs of community colleges.[15]

A study underway comparing proprietary institutions with public community colleges in four metropolitan areas in the United States (Boston is one of them) has results quite favorable to the proprietaries. This study has revealed that there are not significant differences in socioeconomic status between students at public community colleges and proprietary institutions, but there is a substantially higher ethnicity in color and lower verbal ability on entry at the proprietary institutions. In spite of this relatively education-disadvantaged population in the proprietaries, salary expectations of graduates are the same for the proprietaries and community colleges. The current phase of the study will reveal whether or not these dollar expectations are borne out in the labor market. It is likely that they are.[16]

National trends indicate a rate of increase of proprietary school enrollments over the last decade which is twice the rate of increase in degree-granting institutions. Further, federal policies are changing such that student aid funds can go to proprietary institutions. Accreditation and degree-granting criteria are changing such that proprietary institutions will be included. Finally, contracts with proprietary institutions have been undertaken in some instances in Massachusetts in the area of occupational education and they have been recommended in Delaware, Indiana and elsewhere.

In the Boston area over the last ten years, proprietary institutions have been leaders in starting programs in new subject areas. Public and private institutions later adopted these curricula (see II-N, Technical Report).

For many years proprietary institutions in the State of Massachusetts have trained students in business, technical, cosmetology, medical and other fields, yet their role in the education and training of youth and adults has been generally unrecognized. But, trends in student demand and the growth of public training programs at the secondary and postsecondary level are leading to an appropriate time for a public policy decision about their role and function in the State. It may be that public support to proprietaries or students who attend proprietaries is a more cost-effective and equitable policy than continued expansion of public programs and institutions.

Regional vocational-technical schools have begun to offer postsecondary programs in the daytime and have the potential for continuing education programs at the 13th and 14th grade levels. In particular, their technical facilities are excellent and there are already some cooperative arrangements for their use by community college students.

Adult education programs have the flexibility to offer a variety of courses in the evening, on what people are interested in taking. Worcester and Springfield, among others, have developed extensive programs and with publicity campaigns, attracted many new participants. The potential for greater use of high school programs should be developed.

Employers also may offer courses to employees or subsidize them to take classes in local institutions. Since 60% of men and 24% of women are subsidized by an employer or other resource, the influence of employers is great. Coordination among employers and institutions is desirable, as they relate to students and offerings available to them.

Because a full partnership of various types of institutions in a service area is in the adult student's best interests, the following steps should be taken:

First, *the several types of institutions should seek to stimulate each other to expand programs in the fields of their institutional competence and of need rather than to duplicate efforts.*

For example, if there is in an area a shortage of noncredit programs, the colleges in the area, in addition to offering some themselves, should seek to stimulate local school systems through joint noncredit offerings. Similarly in certain areas of the state expansion of the continuing education activity at the postsecondary level of the regional vocational-technical schools should be stimulated (where it would not simply be duplicative and competitive with existing programs). Several regional schools have excellent and unique facilities which are not being used for continuing education as well as they could be.

Second, *all types of institutions should coordinate their efforts such that programs are articulated and transition from one part or level to another is facilitated*. Students should be able to easily use the services of several institutions as they piece together their own program involving transitions from noncredit to credit, secondary to postsecondary, lower division to upper division and on through graduate study. Again, joint planning through the proposed Service Area Planning Boards is the easiest way to bring such a situation about.

Third, in Section K of these recommendations, a set of suggestions is made about how the proposed Massachusetts Open University can become a constructive force toward building the new partnership.

VI.G. Organization and Management in Public and Private Institutions

Major Recommendation:

The senior position with respect to part-time and continuing and nontraditional study on each public or private college or university campus should hold the title of Dean of Adult Continuing and Nontraditional Study, with rank, responsibilities, and prerogatives comparable to those of an academic dean or vice president. The Dean should administer an independent division co-equal with the full-time-day division. The Division of Adult Continuing and Nontraditional Study should offer its own degree (e.g., a Bachelor of General Studies) for which the Division has sole discretion over academic requirements. The Division should also offer other traditional degrees of the college, but for those a joint curriculum committee should govern academic requirements.

Rationale and Sub-Recommendations:

Earlier recommendations sections have already dealt with certain aspects of the overall issue of organization and management of the Alternative Postsecondary Education System. Section A dealt with the necessity of institutionally strengthening adult continuing education as an alternative to the traditional full-time-day education model. Section B developed the reasons why area-specific organizational patterns (Service Area Planning Boards) should be established to handle a variety of functions on a cooperative basis (needs analysis, outreach, minimizing wasteful competition, and maximizing effective service). In Section C, Statewide coordination patterns were suggested with responsibility for part-time, continuing and nontraditional study in the Board of Higher Education or the proposed Board of Postsecondary Education formally being assigned to a deputy or vice chancellor. Coordination at the Statewide level between the Board of Higher Education and the Department of Education has also been suggested. In Section E, recommendations with respect to financial structure and management have been made which require strong management at the institutional level. This section addresses internal institutional management.

Administrators and governing boards should formally recognize the importance of continuing education at many institutions by making continuing education administrators full-time, regularly appointed deans reporting directly to the president. This formal recognition is necessary for both real and symbolic reasons. Basic day-to-day continuing education operations involving questions of costs and pricing, course and program quality control, and program accessibility need the direction of regular full-time deans. If the kind of financial responsibility and accountability recommended in this report are to be viable in practice, and the "alternative higher education system" is to be strengthened, then a lesser rank than Dean is inappropriate. The Dean of Part-time and Continuing and Nontraditional Studies would have all the responsibilities of a senior line academic dean. In short, the president or academic vice president of an institution would have reporting to him two senior academic deans, one for the full-time-day division and one for the adult-continuing-education division.

One of the most difficult problems for most directors of continuing education is dealing with their academic dean, who is usually their superior. It is not a clash of personality but of educational philosophy and approach. In Section A several differences between the full-time-day-youth model and the adult-part-time-continuing-education model were delineated. These differences are embodied in the outlooks of the typical academic dean whose whole professional orientation is toward the traditional academic structure, and the Director of Continuing Education whose professional outlook often stems from the educational reform movement. Subordination of the continuing education director to the academic dean cripples adult continuing education by forcing it to a greater or lesser degree into a traditional mold.

The advantages of autonomy and independence are easy to illustrate. Consider the hiring of faculty. Ideally the Dean of Adult, Continuing and Nontraditional Education should be free to hire that person who he believes will do the best job of teaching a certain class. However, under present arrangements the day faculty at the college have the first chance to pick up any continuing education division teaching assignments as a "moonlighting" salary supplement. The Director of Continuing Education is hence the captive of the academic dean and the department chairmen. The same phenomenon holds true in the area of curriculum planning and in the case of the use of continuing education revenues which are often not under the continuing education division's control. The net result, therefore, of subordination of the Director of Continuing Education is a decrease in the quality and effectiveness of the continuing education program. The continuing education student is thereby shortchanged.

Finance, access, and educational quality, in that order, are the major concerns of administrators of continuing education under the present arrangements.[17] Costs and charges--market considerations--are now the first considerations necessary to beginning, evaluating, or terminating an instructional activity in continuing education. Accessibility and quality are decidedly second and third in order of importance. Program "accessibility" includes such issues as course content, site selection, and scheduling, special admissions arrangements, tuition prices, remedial and counseling services, and special credit arrangements. Special arrangements or special policies to provide for "accessibility" beyond already approved continuing education division practices must be cleared with the academic dean if academic policy is involved, with the administrative dean if support services are required, or in unusually important cases directly by the president. In continuing education, approval of new credit courses usually rests with departments and/or divisions and the faculty academic standards or curriculum committees. Presidential or faculty senate approval for new programs is required.

Given these financial and administrative constraints, it is not surprising that "educational quality" is perceived by directors of continuing education in terms of "basic education standards" as grades, attendance, testing results, transferability of courses, and resulting job placement. The primary determinant of quality is the instructor, whether regular faculty or adjunct. As guarantees of quality control, directors rely upon the oversight of academic departments and the various faculty committees; relevance to students' needs is "assured" with the use of "good teachers". With the proposed total cost budgeting and raised public tuitions, more funds will be available on campus to increase access, and wasteful price competition between publics and privates will be reduced. Further, the proposed Adult Continuing Education Voucher program will result in greater demand and hence greater revenues. With the proposed Service Area Planning Boards, particularly through the joint needs analysis and Area Educational Opportunity Center efforts, access will be increased. The prime focus of continuing education administrators' attention can then shift to educational quality and innovativeness.

In addition to the dominance of academic deans and financial considerations, other significant features of continuing education which compel depencence upon and involvement with the sponsoring institution are important. A few are identified and discussed below.

At the State colleges, in terms of programs and course offerings, there is a heavy emphasis in continuing education on teacher education at the graduate level. This is because directors of continuing education are also in charge of graduate studies which focus on courses leading to the M.Ed. The historical reason for this is that continuing studies was the only way the State colleges could continue graduate programs (which they were otherwise prohibited from having by restrictive legislation). With a damper now on doctoral programs and teacher education and with much of the continuing education content in State college programs skewed toward graduate teacher education, the State colleges may find it difficult to respond with much flexibility to area and client needs in other fields. There are some signs to the contrary, however, in the growth plans of the State colleges' continuing education programs and in their significant nontraditional "open college" experiments (discussed elsewhere).

Many community colleges and some small private colleges, through a combination of operational philosophy and financial necessity, encourage a close working relation between continuing education and community service. Some, notably the community colleges, center their noncredit courses and institutes in the community service area, while their academic programs are in continuing education. Both types of programs may be in single Evening Division or a Division of Continuing Education and Community Service.

Other institutions, notably two and four year privates, define continuing education as a mix of an extension of the day division and of noncredit service courses of an innovative and experiential character. The experimental or innovative types of learning are noncredit service courses and programs, less subjected to faculty scrutiny and likely rejection. The traditional day courses offered in the evening, part-time remain under day faculty control.

There is a trend toward the appointment of a full-time dean or director reporting directly to the president, with development and management responsibilities for extending the day program into the evening, offering courses off campus at the convenience of the students, and a variety of nontraditional formats with appeal to persons not previously served. The success of these ventures is directly related to the college's perception of its educational mission and its ability to translate this mission into the innovative and entreprenurial possibilities and style of continuing education. Not all colleges, particularly those most tightly wedded to the notion of higher education as the traditional four-year liberal arts curriculum, will be able to utilize these possibilities to the utmost.

This review of the regular (day) and continuing education (evening) programs reveals a variety of administrative characteristics and problems. Common characteristics and problems are associated with the size and purpose of the parent institution. Characteristics are not uniformly determined by segmental affiliation, if public, or by whether the control is public or private. Continuing education divisions tend toward "progressive" management practices and toward a "conservative" educational philosophy, for reasons of their entrepreneurial status and a historical experience as extension programs. Their non-traditional mechanisms are forward-looking (where they exist), their program content is conventional. Dependence upon the regular academic program for academic policy oversight and faculty staffing is an inhibiting influence upon continuing education and is used by administrations and faculties for exploitative purposes. Increasingly, career education, work-study options, and the use of adjunct and part-time faculty appear as solutions to the problem. The "demands" of self-support, accessibility, and quality produce strengths and weaknesses as discussed at several points in this report.

The reasons for many continuing education programs progressive administration and management characteristics may be their entrepreneurial role _vis a vis_ the institution and the surrounding community. Their relatively conservative stance on questions of program content and experiential learning may stem from a historical background of "extension education" which was both highly structured and academically conventional. This handicap will have to be recognized and overcome if the DCE's are to develop, support and manage nontraditional programs, and move ahead as an alternative postsecondary education system.

The findings and conclusions concerning the administration and management of continuing education programs point to one of two future alternatives which might solve existing problems and build on present strengths.

One alternative is to integrate the divisions of continuing education with the regular full-time academic programs. By charging chairmen and deans with making their entire offerings comparably as flexible and accessible, many of the advantages of the continuing education division could be absorbed. Tuition differentials would disappear. All students would be provided with the same services. Faculty moonlighting would be eliminated, at least in the sense of teaching extra hours for extra pay. These benefits of integration would accrue to institutions _only if_ they were capable of making some basic transformations, however. Present evidence indicates that they would not change and, in fact, would be most likely to co-opt continuing education sufficiently so that its uniqueness would disappear entirely and the regular programs change not at all. The traditional full-time model with its disciplines and departments, its lockstep progression, its tenured faculty, its faculty unions and so on, is so much stronger than the nascent adult-continuing-education model that the latter would be smothered.

The second alternative is to strengthen the DCE's present semi-independent status by making them fiscally, administratively, and academically autonomous. They could then more fully take advantage of their entrepreneurial character. By building their own educational program in conjunction with the regular program, as well as with other continuing education operations in a given area, a more mature relation might result between co-equal partners. Institutions, their full-time academic programs, and their student clienteles would thus benefit with the creation of strengthened and independent continuing education programs.

There has been, in the past, a serious problem of lack of adequate management and planning information in part-time and continuing education in Massachusetts. Comparable data has not existed between segments of public higher education and between public and private institutions. Moreover, comparable and complete data has not existed for any one segment or geographic area at sufficient level of specificity and detail. This lack of data is one of the consequences of the subordinate status which part-time and continuing education has had in the Commonwealth relative to full-time day programs in most institutions.

In the fall of 1972, this study established a format for a management information system on part-time and continuing postsecondary education which involved management and policy-oriented data gathered in a comparable way for public and private degree granting institutions and from the other postsecondary sectors. This report constitutes the first output of this information system. The data was difficult for institutions to gather the first time around, but it is now possible for this information system to be institutionalized and replicated on a yearly basis. Much of the information was difficult for institutions to gather the first time because data had not been kept in a manner most useful for management and policy analysis, but as the process is routinized, it should be a straightforward and modest effort.

It is essential that the management information system be continued by institutions, Service Area Planning Boards and the Board of Higher Education. Adult continuing and part-time and nontraditional postsecondary educational activities can then be monitored and planned in a manner commensurate with their importance to the population of this state. The type of analysis performed in Volume II of this Study with respect to programs, policies, campuses and branch campuses, area planning, and unmet needs, should be continued on an annual basis through such a management and policy information system. If such a system is not developed, much of the information needed to implement several of the recommendations in this report (e.g. area planning, vouchers to special clientele groups) on a year to year basis would be lacking.

The need for and procedure for needs analysis and planning has been discussed in connection with the Service Area Planning Boards and is discussed further in Section I.

VI.H. Organizing and Using Available Educational Technology

Major Recommendation:

Public and private investment in educational technology in the Commonwealth is being underutilized (both broadcast and studio production facilities). Software and mechanisms for utilizing existing capital facilities are needed. Technology should not be viewed as an opportunity to save money, for there is little evidence that it will, but as a way institutions can cooperate to increase access to adult continuing postsecondary education. The Commonwealth should pursue the following opportunities for utilizing existing facilities: geographic service area, regional and Statewide planning and sharing in the use of facilities and the development of software; State and regional instructional TV networks using existing underutilized facilities; a Statewide video- and audiotape resource center; educational radio, specifically using FM side channel broadcast; providing current school broadcast over public television more effectively through videotape distribution, with the broadcast time so released used for postsecondary continuing education programming; use of commercial TV and radio for continuing education programming in keeping with the increased public service obligations of these stations; and use of TV and radio technology for the delivery of direct instructional services to employers by educational institutions.

Rationale and Sub-Recommendations:

Educational technology includes films, television, computers, dial access retrieval systems, cassettes, and programmed learning. To understand and assess its potential use in Massachusetts continuing and part-time education, exemplary programs, existing facilities, and available equipment were surveyed across the State, and people involved in the field of educational technology were interviewed. These discussions are limited to video and audio technology and are presented from the perspective of communications technology viewed as an educational resource.

Educational technology in the next five to ten years cannot revolutionize continuing and part-time education in the Commonwealth. It is an agent available to policymakers and curriculum designers which can provide flexible access to education, but can serve only a limited function in meeting the immediate demands for access to part-time and continuing education. To be maximally effective in Massachusetts, technology must be supported in three ways: large resources in time, money and manpower for development, distribution and production; a large population for distribution; and a desire on the part of educational institutions to cooperate and share in the costs, organization, development and dissemination needed to employ technology regionally and statewide.

The primary contribution which communications technology can make to continuing and part-time education is to increase access to programs. Many currently excluded groups can be drawn into continuing education if access is facilitated. Adults in general have much interest in learning, but may not want to or be able to focus time and energy on attending classes on a regular basis.

The time available to an adult varies from week to week and month to month. This person reduces his or her learning activity after he or she has acquired the knowledge or skill desired, and this may be at the end of two days or twenty weeks. The adult learner may already possess certain aspects of the knowledge he or she seeks to acquire. In general, this kind of student is not totally receptive to traditional instruction which is almost entirely verbal. A new concept of access is required to meet his or her needs. Disadvantaged groups without public transportation, the elderly confined to homes, women afraid to come into the city at night, prisoners and other institutionalized groups cannot easily attend formal classes. Access for these groups is a major barrier to learning.

Adult and continuing education programs through educational technology can make instruction available to the learner, wherever he or she may be, at whatever time this person requires, in the medium or media which best suit his or her purposes. To reach these objectives instruction must be designed to permit multiple points of entry, self-instruction using modular instructional units, and opportunities for immediate feedback. The creative application of technology to the teaching-learning process can aid in mass access to learning.

Sophisticated technology such as television, radio, computers and multi-purpose telecommunications grids cannot be successfully exploited without centralization of resources and centralized control. Within the State, few universities share resources or programs. Money now being spent on programs and facilities would be more effectively invested in regional resource centers. Supportive regional communications resource centers could provide schools with a core from which programs would be produced, researched, developed, disseminated throughout the region, and distributed to an interested public.

Sufficient mass media resources exist in the State to transmit and distribute part-time and continuing education materials to large populations of consumers (See Table). If universities would cooperate and reciprocate in management, development and implementation, then numerous technological resources could be directly enlisted in short-range plans for part-time and continuing education efforts.

Public Television Access and Use

In Massachusetts, there are three public television stations, all operated by and licensed to the WGBH Educational Foundation. In Boston and surrounding areas there is WGBH-TV Channel 2 and WGBX-TV Channel 44. WGBH is a VHF station, and WGBX a UHF station. WGBY Channel 57 operates (for the Western part of the State) in Springfield.

The WGBH Educational Foundation's contribution to educational pursuits in the State is well known. The Foundation broadcasts instructional television programming to elementary and secondary schools during the day through the administrative authority of the State. It has also for some years been broadcasting continuing education courses in the late afternoon. The courses are in the science fields and targeted for continuing education students who study at home.

WGBY, Channel 57 in Springfield is a new station. It has facilities for simulcasting with WGBH Ch. 2. Any programs aired over Ch. 2 can be fed to Ch. 57 in Springfield. Channel 57 also has studios available. The facilities are limited, but quite adequate for lectures, seminars, discussions and other non-complicated television productions.

With the capabilities of the WGBH Educational Foundation, there is now a statewide television link that is used for the broadcasting and production of television programming for school and home consumption. It is not yet being used in any concerted manner to assist higher education in opening up access to part-time and continuing education clientele.

Channel 44, which covers Eastern Massachusetts as far as Worcester, is available for use most of the day and evening. The WGBH Educational Foundation would welcome opportunities to provide transmission resources. Arrangements could be made to purchase transmission time. Then new programs, or existing programs, could be aired to clientele in their homes, their schools, or at their places of business. Currently, Channel 44 is not in use during the day, and therefore, available for instructional programming.

There is little chance that WGBH Ch. 2 will broadcast college course material beyond what is now being aired without radical policy changes, and the continuing education course material now being aired may soon be eliminated. The station hasn't any available air time unless it changes its normal evening program material, or eliminates daily broadcasts to elementary and secondary schools and replaces this time with college course work. Because its prime programming policy is to broadcast evening public television to homes, WGBH Ch. 2 will not change its evening programming to instructional course material. A more efficient use of money and production time would be to eliminate all elementary and secondary school broadcasts from open air Channel 2 and replace them with such material to new part-time and continuing higher education participants (e.g., women at home, the elderly, etc.) during the hours of 6 AM to 3 PM. Change from broadcast television to a videotape distribution operation for elementary and secondary schools would be far more cost-effective, would eliminate the repetition of programs, and would guarantee that only users would receive the course material. It would also give choice of use to the teachers. The State leases time and facilities from Channel 2 for production and transmission purposes, and that same money could, under the new arrangement, be used to provide schools with video tapes of programs and for the acquisition of videotape equipment.

Freeing the daily air time on Channel 2 would provide 8 to 10 hours that could be used to broadcast programs determined from careful market analysis and audience surveys to be of greatest interest to currently underserved adult populations who wish to pursue their education during certain hours and by television. A great part of this audience already uses radio and television as prime sources of new information.

Commercial Television and Radio Resources and Accessibility

More use should be made of commercial television and radio to assist in providing access to educational materials. Since commercial broadcasting must compete for audiences, stations are not prepared to produce educational programs for college course work except where the programs are least likely to endanger ratings. However, cooperative strategies and policy agreements by the educational institutions could make commercial television a more accessible resource. All of these commercial stations publically proclaim a responsibility to the community. All schedule educational programs. The programs aired are chosen by the station management, are mostly intended for young audiences, and are usually on in the very early mornings during the week and on Saturday and Sunday. No commercial station airs programs for college level course credit instruction. Yet this would appear to be a logical way to partially meet FCC licensing requirements for service.

Radio Resources and Accessibility

Radio, as an educational tool, has largely been ignored in this State; yet, it is a cost-effective means for offering instruction to homes and environments away from campus and institutions. Lectures, discussions, and exams could be produced cheaply and quickly and transmitted to select target populations using the FCC's side channel authorization through existing university facilities to disseminate particular course material.

a) Universities should record the lectures and lecture/discussion classes for later transmission over a sideband channel.

b) Stations should program discussion sessions with telephone link-up so that independent study participants could discuss course content with the professor.

c) Universities should reciprocate and trade each other's programming.

d) Participants might be required to purchase side signal converters ($25.00) as a part of their admission fee, or a collection of universities could cooperate in purchasing bulk amounts of converters to be distributed to individuals, community centers, places of employment.

e) Regional production and transmission centers should be set up to coordinate the instructional radio efforts.

Under this scheme radio would be used as a basic low cost tool to broadcast the same instruction received by those students who attend lectures and seminars, to reach a large number of people outside the campus environment. Homes, classrooms and places of business could receive broadcast programs and study or exam materials. The successful adoption of radio as an instructional tool could provide regions in the State with a central audio source to transmit and receive instruction and information.

FM radio is allowed by the Federal Communications Commission to transmit information on a side channel that is best understood in terms of a closed circuit radio. Commercial stations, such as WCRB and WROR in the Boston area feed muzak to participating organizations through FM side channels. Only the subscribing organizations can receive muzak that is being fed from the FM station. Those not participating are not able to receive information.

For example, Wisconsin University School of the Air currently transmits educational material to a selected target population, including adult and continuing education programs and programs transmitted daily to the blind. KSJR in Minnesota has also successfully adopted radio as a media tool to transmit instructional material. To receive the programs originating from the FM transmission source, listeners must have receivers with a built-in side-signal or a converter - much like a UHF television adapter - that fits onto their radio. The cost for a converter is about $25.00.

Many of the universities in Massachusetts have FM radio licenses and operate FM radio stations that could adapt for transmission on side-signal, as does WGBH-TV. Assuming the universities would cooperate in the distribution and production of radio instruction, side-channel radio could be economically used in part-time and continuing education programs to provide greater access to learning at low cost.

Use of Existing Programs for Education

It may be possible to use programs now on the air and those intended for future airing as course material to be viewed for credit. There are programs currently on the air that have promising possibilities as acceptable course material. Examples include community affairs and information shows. Educators should work with commercial and public stations to advise and suggest program ideas or content areas and research to determine the feasibility of using the content material in certain programs that would satisfy course work in specific areas.

The commercial stations might also be induced to cooperate in providing production personnel and facilities. One example is WBZ-TV's cooperation with the State Department of Education in producing and broadcasting a television series on English as a second language.

Geographic Service Areas

In degree-granting colleges and universities, proprietary institutions, employer organizations, and schools throughout the State, programs are being produced and course materials recorded for dissemination to students within a particular institution. In only a very few instances is there evidence of any reciprocal or cooperative use of available programming or hardware. The result is costly duplication of facilities, program development and audience.

Technological resources and programming should be shared within geographic service areas and each of the proposed Service Area Planning Boards should oversee and foster such sharing. Each area has sufficient hardware to create a communications network from which programming can be transmitted and distributed. Each area also has a certain amount of software programming that could be shared by institutions and thereby provide study materials for part-time and continuing education clientele.

A survey of television and radio studio facilities in educational institutions in Massachusetts performed in this study revealed at least one major studio facility in each of the thirteen geographic service areas. In nearly all cases these studios are under-utilized.

Thus, rather than additional capital investment for new campus studio facilities, priority should be placed on new ways of utilizing existing facilities through cooperation, sharing, and contracts between institutions. The proposed Service Area Planning Board should serve as the vehicle for bringing about such cooperation.

State and Regional Networks

The technology is currently available in Massachusetts to develop regional and statewide communications resource networks without any large capital outlay.

A regional television network in the Boston area should be immediately developed. This can be done easily and inexpensively with the necessary cooperation, coordination and commitment by the educational institutions in that region. The Instructional Television Fixed Services (ITFS) facilities now operating at Northeastern University and the Archdiocese of Boston should be the basis for this network. The ITFS channels allocated by the FCC to Northeastern University and the Boston Archdiocese can transmit programming and course material to classrooms or schools equipped with inexpensive microwave and conversion equipment. The Boston Archdiocese, through the Boston Catholic Television Center, now transmits instructional television programs on two channels to approximately 250 member schools throughout Eastern Massachusetts. There is no limit to the number of buildings or institutions that could receive the Archdiocese's signal. ITFS is an alternative to cable television in the eastern part of Massachusetts where cable linkages are limited.

Those responsible for the management of these ITFS systems are anxious to share their resource and cooperate with all interested institutions in maximizing the use of their technology. The Boston Catholic Television Center and Northeastern University both have antennae on the Prudential Building in Boston. Northeastern and BCTV already have the capacity for interconnecting with each other, which means they can share each other's transmission facilities. Both of these closed circuit ITFS systems are in use only a small percentage of available time. For an expenditure of about $1,500 any institution within line of sight of the Prudential Building can install equipment and receive transmissions.

In addition, the ITFS facilities could be extended as far as New Hampshire and Fall River with only slight additions to Boston Catholic's transmission system. A closed circuit network would thus provide outstanding opportunities for interinstitutional cooperation and coordination of part-time and continuing education materials.

Both Northeastern and BCTV are also ideal production sources. Northeastern's Office of Educational Resources is a sophisticated production center for multi-media or single medium productions, and is now in the process of developing systems programming of course material. The process includes overall development and design of both content and presentation, using the media that is most effective for any particular course. The Boston Catholic Television Center has an excellent production facility with knowledgeable staff and complementary resources that are shared with the Education Development Center. The Education Development Center is a curriculum laboratory with staff and facilities for curriculum development, and for television, film and audio production. EDC is also linked up with Boston Catholic Television's ITFS system and with WGBH-TV via a cable link.

In short, a concerted effort to develop existing ITFS facilities through cooperative arrangements should provide higher education institutions with a closed television network that could be used to transmit course material to points throughout the State. The Commonwealth could contract for the use of these facilities.

Cable Television

Of all the new media available, cable television is the most difficult to apply to education. Cable is not well-developed in Massachusetts and new State regulations may be passed by the legislature this year. Any large-scale use of cable in higher education should involve concerted long-range efforts to work out arrangements with the various cable operations in the state. It is unlikely that in the short-term such arrangements could be made, except in Western Massachusetts where there are some immediate opportunities for a regional cable network. Cable companies such as Pioneer Valley pick up the commercial stations in surrounding areas and feed that programming to subscribers. The cable companies, in almost all cases, will provide an educational channel to the communities subscribing to that cable. They will also lay the cable necessary to link an educational institution to the cable system.

Video and Audio Tape Exchange

Many universities produce video or audio tapes that are then transmitted internally to classes. These individual programs and projects around the state utilize technology; there is interest and determination to employ communications technology to assist in teaching and learning. Still, because of inadequate financing and no centralized planning, accomplishments on the part of individual institutions fall short of the ideal.

To avoid duplications of effort, arrangements must be initiated among various institutions to pool resources, talent and budgets. Reciprocal video and audio tape exchange arrangements should be made within each geographic service area through the proposed Service Area Planning Boards.

Some brands of videotape equipment are compatible with one another, meaning a tape recorded on one brand machine can be played back on another brand. Most institutions in the State use equipment that is compatible in format and therefore software can be exchanged and shared among the institutions. A large majority of schools around the State have videotape equipment that will record and play back on any television set. It is available for faculty and student use to supplement and reinforce teaching and learning (See Tables). Some schools have produced or acquired courses of instruction that are broadcast over closed circuit television or radio, or distributed to classrooms with the necessary recording and playback equipment (e.g., Northeastern University and Bridgewater State College). These courses combine video tapes, audio tapes, reading and individual contact with instructors. Worcester Polytechnic has closed circuit audio and video facilities, in limited use on campus. Through their school of Industrial Management and in cooperation with RCA, they are experimenting with a course on marketing management for RCA's personnel. W.P.I. makes considerable use of videotape as a direct faculty aid. Faculty in all disciplines make short tapes covering specific topics in their courses so students can review difficult material or learn in greater depth than lecture time on a given topic may allow.

Salem State College has instituted an Open College program which started in 1972. The Open College is a combination of independent study, taped television, and conferences and seminars based on British Open University materials. Dean Junior College, Babson College, Bentley College, Brandeis University, Lesley College, and Suffolk University are all participating in a course in Basic Computer Programming. Suffolk also cooperates with Babson and MIT to teach the uses of the computer as a research tool in chemistry and physics. These efforts represent some of the few instances of interinstitutional cooperation in the State through the use of educational technology.

Since video and audio tape playback equipment is becoming commonplace in institutions, employer organizations, schools, etc. in Massachusetts, little capital investment appears necessary there as well. What is needed is software and cooperative exchange of software.

Observers agree that there is little, if any, evidence that the use of TV per se technology will reduce instructional costs.* Data is less clear in the case of radio and video or audio tape. There is ample evidence that the fascination of educators with the hardware of technology has far exceeded their abilities to use it effectively. In any Massachusetts policy or investment in educational technology, emphasis must therefore be placed on using existing resources. To do this, advantage must be taken of the unique characteristics of the technology - namely that it is particularly well suited to (a) cooperative efforts involving more than one institution; (b) regional or area based use; and (c) that it is a means of access which can make the educational system useable by many presently underserved clientele.

Use of Technology to Serve Educational Needs of Employers

Several possibilities for constructive connections between employers and educational institutions have been mentioned elsewhere in this report. Another is the use of educational technology (especially ITFS videotape cassette or cable technology) to provide in-plant courses. Such courses can be tailored to the needs of a particular employer, or they can be regular course offerings delivered in-plant.

There are examples in Massachusetts of productive connections between employers and continuing education divisions, usually consisting of satellite teaching operations. In several other states, there are exemplary operations based on ITFS, cable, and videocassette technology. Such systems have been successful only when a clear need was ascertained in advance. Needs analysis in advance of system design is therefore appropriate in Massachusetts.

The Stanford University system in Palo Alto, California provides an example. In this simple system, certain regular courses (usually graduate level technical courses) and special courses are "taken" by students in-plant during daytime hours in a variety of firms in the area. The firms pay a subscription fee and selected employees enroll. At a given weekday and hour employees gather in a company teaching room to watch monitors and participate in the campus several miles away. There are numerous other examples in other states (e.g., closed circuit talk-back television at the University of Florida, Southern Methodist University in Dallas-Fort Worth, the University of Michigan, the University of Minnesota, the University of Southern California and the City University of New York). If an employer market is specified in Massachusetts (e.g., greater Boston) then examination of successful operations in other states should be undertaken before proceeding. It should be noted that closed circuit talk-back TV has an advantage in comparison to videotape since it has the talk-back feature.

VI.I. Potential User Demand as a Basis for Planning Continuing Education

Major Recommendation:

Because of the complex multivariate character of the demand for adult continuing postsecondary education, continuous systematic needs analysis should be performed by the proposed Service Area Planning Boards, the Board of Higher Education and the proposed Massachusetts Open University. Planning of programs, branch campuses, use of technology, outreach efforts, etc. should be much more carefully linked to needs analysis than has typically been the case for full-time higher education. Accurate and up-to-date estimation of demand is the key to rational response to changing educational needs and wishes of adults.

Rationale and Sub-recommendations:

In the last few years educators have become aware of a growing demand for continuing postsecondary education. Recent experiments in nontraditional, part-time study have been notably successful and seem to tap a large potential market of students beyond those who have been enrolled in traditional part-time adult education programs. As a consequence, there is great interest among institutions and government agencies in proposals for new or expanded programs of continuing postsecondary education to meet the needs of these diverse groups.

The exact nature and extent of demand in continuing and part-time education programs is clear neither to educators in the traditional system nor necessarily to the users and potential users of these programs. Much of potential demand is still unmet by current programs and remains latent in the population. In education where private profit incentives are muted and competition does not lead automatically to consumer responsiveness, preferences will not necessarily be discerned. Some form of market survey must systematically be undertaken to anticipate and estimate demand.

The demand for part-time and continuing education is particularly difficult to assess because of several characteristics of the market. First, it is a new product; thus projections of current or future demand cannot be made from past experience. The primary example of this is demand for an open university of television courses and packaged programs. Current or past enrollments in part-time programs would give no guide to demand for these kinds of programs; neither would projection of enrollments based on changes in sociological factors.

Demand is composed of two parts· "active" demand, that which is currently being served; and "latent" demand, that which is not met by current programs. One particular difficulty of a market study is delineating elements of latent demand: what programs would be desirable and under what circumstances would demand become active.

Many students presently excluded from full-time day college programs could be brought into the educational system through part-time and continuing education. Underserved urban and rural sub-populations do not have adequate information about what is available to them. With improved publicity and communication through other community organizations such as churches, clubs, and public aid agencies, many people might be attracted to continuing education.

Secondly, demand for part-time and continuing education has more than one source; personal, business, and government or societal. Personal demand has two parts: (1) as a personal consumption good in courses such as art history or literature and (2) as an investment good for job advancement by attaining a degree or specific vocational training. Businesses are interested in such courses as vocational training for employees and government is interested in manpower training to ease labor shortages and contribute to productivity. These three sources of demand must be considered by a planning agency, and each requires a different method of estimation.

Third, continuing education is a multi-product sector. Demand will vary by programs, teaching format, location of study, time of day, type of faculty, cost and other variables considered by a potential consumer.

Fourth, demand for continuing education programs will change with the economy and social trends. People having more time and money to pursue personal or job advancement goals and a social movement like women's liberation are leading to increases in enrollments. However, such trends are difficult to predict in the future. Thus demand for continuing education is not one simgle number but varies with many program characteristics and external factors. It would be desirable to know demand for each, but this involves a much more comprehensive analysis than in the typical consumer market.

These factors in the market for continuing and part-time education must be considered when planning new programs. Demand from business and the government and social trends in the future are to some extent matters of judgment. Considerations are, for example: projected economic growth rates and shifts in the industrial structure from manufacturing to services, changing patterns of government funding among defense and social service spending, trends in licensing procedures and use of salary incentives to employers for more education, increased leisure time and life expectancy, and other social and political factors. Personal demand in the present, however, can be estimated by a well designed market study.

Design of a Market Study (Review of Studies in Other States)

There are several problems in the technical design of such a market survey. In particular, specific populations may be over or under-represented, leading to inappropriate public policy and funding patterns. The relevant market surveys conducted to date are: and Educational Testing Service direct interview durvey of interest across the country in educational activities, a California mail survey of the need for external degree programs, a Colorado direct interview survey of educational needs, and a Massachusetts telephone survey of interest in a proposed open university.[19] The results of these surveys and the strengths and weaknesses of the methodologies employed are discussed in detail in Section IV of the Technical Report (Volume II) of this Study.

A summary of the principles illustrated by the various studies is presented here.

Step (1): The extent of interest people have in the proposed educational option must be determined for the various groups in the population.

Step (2): The willingness of those interested people to pay for the option must be determined.

Step (3): The percentage of each group in the population that is both very interested and very willing to pay must be determined.

Step (4): The results of interest and willingness to pay must be generalized to the population at large.

While a variety of standard survey techniques (mail, telephone, direct interview surveys) for determining preferences are suitable for Steps (1) - (3), the problem of Step (4) requires the use of demographic analysis. The determination of preferences of each group must be combined with techniques of projection onto the population.

Typical problems encountered in educational market survey work which must be dealt with if the survey is to have validity as a basis for public policy formulation are:

Problem: Narrowing the proposed "product" to specifics. Demand for an educational service is multivariate. It varies with each possible combination of type of program, subject, format, location, time, tuition, etc. Ideally, demand should be estimated for each combination, but this is not possible.

Problem: Narrowing the possible market. The problem arises when survey results are then generalized to the entire population, if that generalization is not presented with sufficient qualificiation. For example, if the specific product is an upper division external degree, only people with 60 units or more of college credit would be questioned and the results would thus show that low income people have very low interest in an upper-division external degree program. Someone using the results may mistakenly generalize and conclude low income people have a low interest in any external degree program.

Problem: Determining what percentage of those saying in a survey that they would enroll in a program if offered actually would do so.

Problem: Selecting the sample population to be surveyed. A random sample of Census data is best, but sample people are then hard to locate. A telephone sample is convenient but is not representative of the population at large unless weighted.

Problem: Bias in response to certain questions asked or procedure for asking them; e.g., low status individuals may refuse to answer questions forcing them to admit their low status, particularly if the mode of asking the question permits them to perceive that they are not anonymous.

Estimates of the Market for an External Degree in Massachusetts: Two Approaches

A recent study conducted for the State College System of the market for an for an external degree in Massachusetts* has determined preferences and willingness to pay for an external degree option by use of a telephone survey of a sample of the Massachusetts population. The results of the survey of preferences are consistent with those of the student survey in this study. Greatest interest was expressed in both surveys for credit for experience options, least interest in open university options such as television, radio, or correspondence courses. Current students also expressed great interest in expanded counseling services.

However, different conclusions are reached in the Becker telephone survey and in this Study regarding the educational profile of Massachusetts citizens, and the broad potential and prime markets for an external degree. The studies agree on the results of Steps (1) - (3) above, testing of demand among various groups, but diverge on Step (4) -- projection of interest onto the population. This Study has been based on demographic analysis (i.e., comparing all student data to the U.S. census data for the Massachusetts population) whereas the telephone survey was based only on the telephone owing population sampled. The reasons for this stem from the fact that households with telephones surveyed are not representative of the population at large, but are skewed toward higher income, higher occupational status, and higher previous education individuals.

Both sets of data on the educational profile and broad potential and prime markets are presented and the implications of each for State policy regarding the structure and focus of the proposed Massachusetts Open University are discussed.

---

*For a different perspective on the educational profile of Massachusetts residents, the market for continuing education, and the prime market for the Open University based on a telephone survey of Massachusetts residents, see The Market for Continuing Education in Massachusetts, by Becker Research Corporation, Boston, Massachusetts, 1973, a study performed for the Massachusetts State College System.

Educational Profile: 18 and Over of Massachusetts Population

	U.S. Census Data for Massachusetts 1970		Based on Sample Population used in Telephone Survey of Demand for an Open University in Massachusetts	
college graduates	425,000[(a)]	12%	750,000	25%
1-3 years college	658,000[(b)]	17%	810,000	28%
high school diploma	1,254,000[(c)]	33%	1,020,000	34%
high school	712,000[(d)]	19%	270,000	8%
less than high school	725,000[(e)]	18%	150,000	5%
TOTAL	3,803,000		3,000,000	

(a)	394,000	25 and over
	58,000	18-24(8.8% of 660,000)
	452,000	
(b)	346,000	25 and over
	312,000	18-24 where assume 80% are high school graduates, 70% of those go on (.8 x .7 x 660,000 - 58,000 college graduates)
(c)	1,096,000	25 and over
	158,000	18-24 where assume 80% are high school graduates and 30% do not go on (.8 x .3 x 660,000)
(d)	593,000	25 and over
	119,000	18-24 where 17.5% get to high school, but do not graduate
(e)	712,000	25 and over
	13,000	18-24 drop out before high school (2.5%)

The broad potential market eligible for the external degree is defined by the State College System as those with less than a college degree and at least some high school. Because the profile of the Massachusetts population diverges in the two studies, so also does the profile of the broad potential market.

Broad Potential Market[a] for an External Degree in Massachusetts

	Generalization to Total Population from U.S. Census Data and Telephone Sample Survey Preference	Generalizing to Total Population from Telephone Sample Composition and Telephone Sample Survey Preference
1-3 years college	25%	40%
high school diploma	48%	48%
high school incomplete	27%	11%

(a) By definition those with less than college degree, at least some high school.

The Prime Market is composed of those people who express both an interest in the program and a willingness to pay. To determine the Prime Market, the interest and willingness to pay expressed by each student of the Broad Potential Market is weighted in this Study by the relative size of that group in the Massachusetts population, in the Becker Study by the relative size in the telephone sample.

As a result of the different educational profiles used in each study, different conclusions are reached regarding the composition of the Prime Market.

Prime Market for an External Degree in Massachusetts

	(b)	(c)
1-3 years college	39%	40%
high school diploma	36%	44%
high school incomplete	25%	13%

(b) This profile was constructed from Tables 1 and 2 (pages 3 and 5) of the Becker report showing interest and willingness to pay of each group and the distribution above the broad potential market.

(c) Some non-response accounts for the fact'that this column does not add up to 100%.

If the extent of interest in the external degree expressed by those people with only some high school education and actually reached by the telephone survey is projected onto the Massachusetts Census group of people in this category, with or without telephones, then they would comprise 25% (not 13%) of the prime potential market. Because some people, institutionalized or disabled and without telephones, may have no interest in the external degree but are included in the Census, 25% is the upper limit for this group's representation in the prime potential market. The 13% of the telephone sample is the lower limit.

These differences in prime market composition are important because, taken together, the Becker estimates and this Study's estimates of the composition of the prime market for the Massachusetts Open University bracket the true prime market composition. The Becker results emphasize the demand among better-educated groups and this study emphasizes the demand among less-educated groups.

These differences in methodology determine variations in demand estimates and have implications for difficult decisions in public policy. The analysis of demand does not lead automatically to policy conclusions; the simple existence of demand does not mean that it should or can be met. Rather, the institutions and governments involved must decide what alternative programs should be funded or subsidized given identified demand, the cost constraints on the budget and other aims of the State such as manpower planning. If demand exists among several different groups, then State policy must determine which groups will take priority in being served. One consideration in formulating that policy is an assessment of which population groups are being served in current continuing education programs.

Better-educated people are already being served by the current continuing education system, while less-educated people are not. Comparing the interest of citizens in Massachusetts, as expressed in the Becker survey and weighted by this Study to reflect the total population, with actual participation in current continuing education programs is startling. While 25% of those interested and willing to pay for an external degree program have less than a high school diploma, only 2-3% of those currently enrolled in continuing education have less than a high school diploma. Of the students who would technically be eligible for the open university (less than college degree), those with less than high school comprise 5% of the total.

The policy implications for an Open University in Massachusetts are considerable. If policymakers rely solely on the telephone survey demand data in designing the proposed Massachusetts Open University, then the resulting institution will favor the better educated, higher income and higher occupational status Massachusetts adults. Planning for the educational needs of poorer, less educated, lower occupational status adults will be inadequate.

	Prime Market for External Degree (Weighted estimate of this Study)	Current Continuing Education Students in Massachusetts(a)
1 - 3 years college	39%	68%
high school diploma	36%	26%
less than high school	25%	5%

(a) Some students included in the student questionnaire may have received a high school equivalency since entering the program, but it is unlikely that the results of this table would be substantially altered by this consideration.

Designing the MOU to serve those with 1 - 3 years of college could be a reasonable State strategy were it not for the fact that people at the 1 - 3 years of college level are being well-served by the current continuing education system, while those with less than a high school diploma are not. There is, therefore, a case for designing certain programs of the Massachusetts Open University to focus on the unmet needs of the less-educated.

The exclusion of lower income, occupation and education groups from current systems of continuing education is partially due to less interest on their part, partially to an inadequate response of the system to their needs. Although interest in the open university is less in low-education groups, their interest and willingness to pay is nevertheless substantial as tested in the Becker survey (and corroborated in surveys in other states).

The necessity for planning specific programs to meet the needs of the less-educated stems from the fact that people with less than a high school diploma do have different interests from people with some college education.[20] They are interested in business, technical and industrial skills, while those with some college education are interested in business-management and higher level technical skills and liberal arts.

People with less than a high school diploma also perceive different barriers to participation in education such as cost, no information, low grades, too much red tape, and no transportation. Better-educated individuals find not enough time and other responsibilities as barriers. Thus, planning the Massachusetts Open University on prime market data which are biased toward those of higher educational attainment could discriminate against those most in need of a "second chance" MOU opportunity.

IV.J. Continuing Education and the Economy

Major Recommendation:

A continuous coordination of employers and continuing education directors in each geographic service area through the auspices of the area SAPB is recommended to provide for a flexible and responsive system of meeting local needs. The goal of coordination would be to leave educational decisions to students, but to counsel and guide them in choosing areas of greatest job possibilities. Students would become aware of fields of job shortage or surplus and employers would avoid costs of unfilled jobs.

Rationale and Sub-Recommendations:

Continuing education may contribute to the alleviation of several pressing economic problems in Massachusetts: high rates of unemployment, occupational shortages and surpluses, and job dissatisfaction or lack of mobility for certain groups in the job market. Particularly at the area level, continuing education programs and offerings can be coordinated to provide training for the unskilled or retraining for workers needed in jobs as the local economy shifts.

Education as a Form of Investment for the Individual

Educational attainment is associated with a number of economic benefits for the individual: the likelihood of higher earnings on the job, access to more interesting and satisfying types of work, and increased chances to be employed rather than unemployed. Education also has costs associated with it: the costs of attending school, and more importantly, the costs of income foregone when the worker spends time away from the job, or leisure given up.

In theory, each individual will make a judgment as to the expected economic benefits and costs of his going to school. If benefits are sufficiently greater than costs he will attend. There are a variety of types of education and special markets for educated labor which the individual must consider when making a specific decision about further education. On the one hand are a number of educational options he may choose from general education to specific vocational and job-related educational programs. On the other hand is a diverse and changing job market. At any one time certan skills may be in greater or less demand depending on shifts in the economic structure and the general economic condition.

An investment in continuing education, while unique in several respects, is also made according to this general decision process of weighing benefits and costs. Most continuing education students are younger than 35 since benefits are greater for the young. Motivation and interest are highly job-related (83% for men, 70% for women students). The concentration of continuing education students in teacher education courses, business and engineering are explained by job motivation. Teachers receive clear salary advances as benefits and face lower costs than the average student when they receive vouchers for taking on student teachers. People in business courses are often those who at a younger age took programs in technical or scientific fields and now need some formal training to move easily into management positions. Continuing education plays an important role in occupational retraining and updating. Although 48% of students are continuing their education in the same field as their former education, 52% are retraining in new areas of skills.

Continuing education in postsecondary institutions is only one of several forms of part-time education open to adults. Trade and technical courses have been concentrated in proprietary and correspondence institutions. Extensive job-specific training is also carried on within business and industry.

In summary, each continuing education student concerned with advancing in his career has made a judgment that the economic benefits will exceed the costs. This judgment is based on his perceptions of opportunities for employment in the job market, perceptions which may or may not be accurate.

Educated Workers and the Job Market

What is the impact on an economy of higher levels of education among workers? A country such as the United States has a comparative economic advantage in the skills of its people. Not only are educated workers more productive in certain jobs and able to perform more complicated jobs, but a well-educated group of businessmen, engineers and scientists have made productive changes in marketing and distribution mechanisms and instituted technological innovations.

It has been recognized since World War II that in both advanced countries such as the U.S. and in underdeveloped countries, a better-educated labor force is one important means to economic growth. If this is the case, governments are of course interested in how many workers should be educated to what levels and in what fields to maximize this growth. In particular, continuing education can alleviate the problem of unforeseen shortages and surpluses in specific labor markets by providing occupational retraining and upgrading of skills of adults.

Currently, there is little planning for continuing education specifically. It is assumed that individuals will perceive correctly the benefits and costs of continuing education in various fields and will make appropriate decisions in response to needs of the labor market, but often this is not the case. There is evidence, particularly among current high school students and housewives thinking of returning to work, of serious misconceptions about the demand in certain occupations and the education needed to be hired for them. Thus a more active coordination of continuing education programs and the labor market would be desirable. Both students and the economy would benefit from some form of coordination: students would become aware of current fields of shortage or surplus and employers would avoid partially the costs of adjustment to either shortage or surplus markets if students were attracted to skills they needed. The goal of such coordination would still be to leave decisions to the individuals, but to structure a situation in which individual decisions will lead to socially and economically optimal conditions.

Because there is no feasible method to project needs accurately on a long-term basis (uncertainty is too great), measures should be taken to maximize the flexibility of the response of continuing education programs to economic needs in the short-term. The quicker the response and the more accurate the response, the lower are the costs of maladjustment in the labor market and the higher the benefits to individuals and the economy.

Planning for Continuing Education in Massachusetts

The primary economic concern in Massachusetts, in 1973, is an unemployment rate remaining as high as 7%. This rate reflects an economy which has not sufficiently counteracted the steady post-war loss of jobs in manufacturing, particularly textiles and footwear. The national recession of recent years has hit Massachusetts particularly hard and recovery has been slower here than in other areas of the country.

The solution to unemployment in Massachusetts can only come from the creation of more jobs in these areas. But several measures can also be taken to improve the employability of the unemployed or underemployed (in jobs below their capabilities). Many of those who lost jobs in failing industries were older than average and lacked skills needed for new jobs. Many are from minority groups recently moved into Massachusetts. For these groups language barriers, lack of public transporation and day care centers are inhibiting employment. Many are young workers and veterans lacking needed job skills or an understanding of the job market.

Although education and training cannot alleviate unemployment without the creation of jobs, it can improve the employability of these groups lacking needed skills. Continuing education programs could be used in each area to raise or upgrade the skills of unemployed or underemployed groups and moderate the effects of shortages and surpluses in the job market.

The coordination of stimulating the economy to create jobs and educating workers to fill these new slots should occur on an area level, not a statewide level. As stated in the Boston Globe editorial of June 11, 1973, economic problems can best be solved at the local level:

> "Perhaps the largest single danger in developing public economic policy is the failure to distinguish between the individual problem, whether it is the industry or the locality, and the overall problem. Put another way, a rapidly expanding Polaroid, which has put millions of dollars into New Bedford to create new jobs, clearly has a different set of problems from a shoe manufacturer in Lynn, who is wondering whether he would stay in business at all. Gloucester, with more than 10 percent unemployment, has a very different set of requirements from a Boston with 5 percent."

A second set of problems for the economy is the development of shortages and surpluses in the job market. Although unemployment and manpower problems are associated to a greater extent with disadvantaged and unskilled groups, shortages and surpluses develop in markets for highly skilled and professional jobs as well. Continuing education programs could be used to retrain or upgrade skills of workers as necessary. For example, several years ago a major source of new engineers was a pool of technicians without formal degrees whose skills were upgraded. This type of training could be coordinated in continuing education programs which would also be in a position to award credit for such work.

A third problem in the economy is job dissatisfaction among certain types of workers and the need for avenues of job advancement in the labor market. Many national studies and news reports are now being published, such as Work in America,[21] which describe the extent of worker malaise. In the telephone survey conducted in Massachusetts, 23% of clerical, 15% of sales, 15% of operatives, and 25% of laborers (who have completed their education) say that they are somewhat or very dissatisfied with their present careers.[22]

Opportunities need to be provided to people who, after the normal college age, feel that they are in uninteresting or dead-end jobs. Continuing education by its very definition provides such opportunities; but more could be provided if better coordination with employers existed. For example, programs to upgrade skills of secretaries might be offered in conjunction with efforts of firms to bring more women into middle management positions.

Six principles should be followed in considering the coordination of continuing education and the economy:

First, continuing education should be publicly encouraged. It can serve an important adjustment function for both individuals and the economy. Its contribution to productivity warrants support. The high level of technical skills in the Massachusetts labor force is the State's comparative advantage in the national economy. Opportunities for upgrading of skills or retraining enhances this capability. Furthermore, continuing education can facilitate upward mobility of disadvantaged groups.

Second, communication between employers in each area and continuing education directors should be maximized. Employers should provide information about shortages and surpluses, both current and projected, and provide suggestions for how curricula can be organized to best serve their needs. The Career Guidance Institute at Fitchburg State College is an example of this kind of coordination which has been a success on the full-time level. Such efforts at coordination should be encouraged in continuing education. Information about job openings, wage rates, etc. should be periodically fed into curriculum planning.

Third, continuing education programs should be flexible and responsive to changing curricular needs. When new programs are needed, they should be offered as soon as possible. When old programs are not needed, they should be terminated. The speed of response is very important, lest the system as a whole overeact to needs. For example, there are indications that allied health programs which were initiated in response to perceived needs may now be training too many students for the job market. For these reasons the flexibility and autonomy of continuing education programs should be encouraged.

Fourth, guidance and counseling efforts to reach students should be expanded. Many students lack the information to make decisions about their education and careers. More aggressive programs to disseminate information and counsel students are required. Employment "fairs" for women at Middlesex Community College are an example of this kind of program. Women returning to the labor force do not have readily available means with which to judge opportunities in the labor market and to plan accordingly their preparatory curricula. Employers and directors of continuing education can play a constructive role in providing women with up-to-date and realistic information.

Fifth, outreach programs to disadvantaged groups should be closely coordinated with business and industry. It is the responsibility of the continuing education system to provide direction and career counseling for these groups. Without the financial means, the self-confidence to pursue education on their own, and without the information or the belief that continuing education can be helpful to them if they do pursue it, these groups are unlikely to succeed in using continuing education to their advantage in the job market.

Sixth, coordination between all providers of continuing education should be made; i.e., degree-granting institutions, proprietary institutions, vocational-technical schools, adult evening programs, and in-house business programs. Degree-granting programs should not be considered in isolation. Information on jobs available in the area, or projected into the future, and the educational requirements necessary for these jobs should be gathered through the SAPB and disseminated to each institution. This job information should be central to counseling efforts in each program.

Such a system of coordination and dissemination should improve the responsiveness of the continuing education system to labor market shortages and surpluses. The decisions will be left in the hands of the individual students; but with good information systems students will make decisions which benefit themselves and the Massachusetts economy.

VI.K. The Role of the Proposed Massachusetts Open University (MOU) as Part of the Alternative Postsecondary Education System

Major Recommendation:

The proposed Massachusetts Open University should be carefully designed to perform several functions not now well-performed by existing continuing and part-time education so that the roles of the proposed open university and the existing continuing education activities will be complementary and not duplicative.

The MOU should be the State Examining University and offer MOU external degrees at the Associate and Bachelor's levels based on certification of competency through proficiency examinations. The fastest and lowest cost means of implementing such degrees is through purchase and borrowing of examination materials from other states which have functioning external degree programs.

The MOU should establish contracts with non-degree-granting proprietary institutions, home-study schools, employer-based education programs, public vocational schools, private adult education centers and other organizations which provide postsecondary instruction but do not grant degrees, so that students in those settings can accumulate MOU credits for appropriate study towards MOU degrees if they wish.

The MOU should establish a computerized credit bank in which both regular course credits from any institution and "continuing education units" (for noncredit work) could be stored and accumulated by adults who study over a period of time at several different institutions.

The MOU should also offer Associate and Bachelor's degrees in liberal studies, based on a structured liberal studies curriculum (again using materials from other states) and relying heavily on credits accumulated at other institutions and on home independent study, and in general studies in order to provide a flexible degree option for granting of degrees through an MOU credit bank.

The MOU should devote a portion of its efforts (jointly with the Bureau of Adult Services of the Department of Education) to providing a "second chance" educational opportunity to adults with a high school diploma or less. Such adults have a considerable interest in opportunities for furthering their education, and they are not now being well-served by the continuing education system.

Rationale and Sub-Recommendations:

The MOU proposal submitted earlier this year to the Board of Higher Education details many of the specific components a State-wide nontraditional system of continuing education must have if current needs are to be met with an effective utilization of existing and future resources. As stated in this report, the collected efforts of the current continuing and part-time programs constitute the basis of an alternative postsecondary education system; the MOU can provide specific functions as a part of this alternative system. Recommendations are presented below regarding the structure and operation of the MOU, which, if implemented, would strengthen the structure of continuing postsecondary education in Massachusetts.

Given the extensive collection of providers of postsecondary continuing education in Massachusetts, the system of adult continuing education in Massachusetts has ample instructional capacity. What the system needs are specific services to fill existing gaps.* These are: (1) new institutional modes whereby a citizen can have his knowledge, however gained, certified and converted into credits towards a competency-based degree--an examining university; (2) a mechanism whereby citizens can store educational credits of various kinds and accumulate them towards a degree--a credit bank; (3) new ways of providing degree equivalent credit for equivalent courses and programs in proprietary institutions, home study schools, employer-based training and other nondegree granting educational institutions--a series of "contract degree" arrangements; and (4) an impetus to use the vast array of instructional technology facilities available in the State-- a coordinated effort to use available technology. Each of these is discussed below. It is clear that a very high social return on modest State investment can be obtained if the MOU operates in this fashion, a much higher return per dollar than if the MOU moves heavily into instructional capabilities duplicative of existing continuing education.

Competency-based Degrees:

The proposed Massachusetts Open University (MOU) should function first and foremost as the State examining university. There are many providers of educational services who do not want to be directly in the credit and degree granting business. What is needed is an option whereby the student can utilize such services and subsequently convert the learning into degree credits if he wishes. To do this, the MOU should be given the authority to grant several types of external degrees.

MOU external degrees should be offered at both the Associate and Bachelor levels. These nontraditional degrees should be based on competency examination methods and should be offered in those fields for which proficiency exams have been developed. The State should not spend large sums of money in developing proficiency exams. Rather, it should purchase or borrow proven materials developed in other states. This lower cost approach also has the advantage of making possible the offering of an external degree in a variety of fields in a very short time.

Associate and Bachelor's degrees in General Studies should also be offered since that flexible degree option could provide a vehicle for granting MOU degrees through the credit bank mechanism (suggested below) and through formal postsecondary level study in nondegree granting proprietary institutions, home study schools, employer-based education programs, adult centers, regional vocational schools and other organizations (described below).

---

* An example of an Open University which has resolved many of the potential difficulties facing the proposed MOU is the Lincoln State University, the Illinois Open University. This institution provides alternative methods for earning degrees while furthering interinstitutional cooperation. Credit and noncerdit courses are offered using a variety of educational resources in the State. Lincoln State University grew out of the Collegiate Common Market Task Force.

Credit Transfer and Accumulation:

The proposed Massachusetts Open University, the Board of Higher Education, or the proposed Board of Postsecondary Education, should establish a Statewide credit bank for part-time and continuing postsecondary education, and an MOU degree option based on credits accumulated. This should be a computerized operation which would record both regular course credits and continuing education units (CEU's), the "continuing education unit" being a contract-hour-based unit of measurement for nontraditional educational experiences within the context of continuing education programs.

The CEU system, now in successful operation in other parts of the country, should be formally adopted on a Statewide basis. It should be the responsibility of each Service Area Planning Board working with the Massachusetts Open University, to assign CEU's to the appropriate noncredit educational offerings of its member institutions.

The Statewide credit bank would provide for any student a readily available computer record of courses and continuing education units accumulated over a number of years. Thus, regardless of time, place, or educational circumstance, the record of a student's conventional and nontraditional educational experience would be available for planning life-long learning and for evaluation and conversion into credits toward an external degree should the student wish to do so.

The great need for such a credit clearinghouse is revealed by the wide and inconsistent variation in institutional policies regarding credit transfer, credit for life experience, credit by proficiency exams, etc. Policies and practices vary and adult students often find they have accumulated credits through continuing education in one institution which are not acceptable at another. This problem is particularly troublesome for adult students since they are much less likely than younger full-time students to do all their study at a single institution.

Contracts for MOU Degrees and Course Credits with Non-Degree-Granting Education and Training Institutions and Organizations:

There are in Massachusetts thousands of adults who have had formal postsecondary instruction (in the settings noted above) comparable to traditional college courses for which they have been unable to obtain credit towards an associate or bachelor's degree. The MOU should establish contractural arrangements whereby students in proprietary institutions, home study schools, employer-based education programs, public vocational schools, private adult education centers and other organizations may become candidates for MOU degrees, accumulating credit for appropriate study.

For much postsecondary study, the lack of degree credit has nothing to do with the quality of instruction or competence gained or the flexible or nontraditional character of the program. Rather it has to do with the organizational character or source of financing. Thus, much of such instruction is a logical candidate for contractual arrangements between the provider (who may not wish to be in the formal business of granting degrees) and the Massachusetts Open University as an external certifying and degree-granting organization. Students in, for example, a proprietary school would either simply receive "credit" transferable to the MOU for an MOU degree or they would take a series of MOU exams at the end of their period of study. The whole process could be quite simply operated once the initial contracts had been worked out. The State operating expenditure could be very small relative to the thousands of students involved and the hundreds of degrees which could be granted each year.

Interview and data research conducted by this study (reported in Volume II Technical Report and earlier in this volume) with proprietary institutions, several employer training programs and other adult programs revealed a definite interest on the part of these institutions to develop the type of MOU affiliation recommended here.

Thus, there are four compelling reasons why MOU Contract Degrees and Credits at periphery institutions should be a top MOU priority. First, there is great interest in the possibility of such contractual arrangements among the provider institutions mentioned. Second, there are thousands of students who would benefit. Third, the cost to the Commonwealth would be very low per degree granted, primarily because there would be no instructional cost for this aspect of MOU operations. Fourth, there is a great deal of high quality postsecondary level instruction and learning now going on in non-degree granting institutions and organizations.

It should be noted that in this recommendation and those in the technology section, the stated objectives and methods apply equally well to full-time study (e.g., in proprietaries) as to continuing and part-time study. The recommendations are so offered.

Target Clientele for a Second Chance University

In Section I of these recommendations, there appears a discussion of the alternative interpretations of the prime market for an external degree. The conclusion of this study is that a large portion of that "prime market" has less than a high school education. Therefore, the MOU should have one of its prime foci service to these clientele. In particular, of total "prime market" 25% has not completed high school, 36% has a high school diploma, and 39% has 1-3 years of college.

Moreover, it is clear **from** comparing the demand figures with current continuing education participants that the existing continuing education programs are not serving these client groups at all well.

	Weighted estimate of prime market for external degree derived in this study	Current continuing education students in Massachusetts
1-3 years college	39%	68%
High school diploma	36%	26%
Less than high school	25%	5%

Also, national data presented earlier in this report indicate the high demand. Thus, service to those underserved clientele should be an MOU priority.

Further discussion of the extent of interest in additional education by low income and low previous education population groups is presented in Section I of these recommendations and the Technical Report (VolumeII) of this study.

Preferences Among Adults in the General Population and Among Continuing Education Students for New Programs

Data is available which can guide both continuing education administrations and MOU planners in selecting teaching-learning modes of greatest interest.

For Current Continuing Education Students:

The student questionnaire administered in continuing education provides information about the interests of students currently enrolled. Although students are interested in more counselling and credit for experience, they are not strongly interested in television or correspondence, home study options.

Both men and women students are interested in more courses of an academic and professional or graduate nature: 58% state they would use courses if more were offered at the professional or graduate level. 54% would use academic courses if offered. Less interest is expressed in total in other course areas: 50% of women state they would use social and community service courses (36% of men) and 51% arts and crafts, cultural or personal interest (33% of men). Men express some interest in business courses (42% vs. 23% of women) and trade or technical courses (39% vs. 25% for women).

Greatest interest in program change is for counselling services and credit for experience. 61% of men and 67% of women state they would use more counselling services and 72% report they would utilize an opportunity to get credit for experience.

Of those married, 55% of men and 59% of women state they would go to a family center where programs for adults and children would be offered separately but at the same time and in the same building.

Moderate interest is expressed in an "open university" program (defined as expanded home television and correspondence) and in more branch or local campuses. 41% state they would use an open university program, 45% another branch campus.

Only 27% of men and 41% of women think more courses should be offered in work places and only 22% would be interested in longer class meetings such as on weekends.

For the General Population:

The results of a telephone survey of a sample of the Massachusetts population concur with the results of the student questionnaire: Greatest interest was expressed in credit for experience and traditional classroom courses; least f[illegible]elevision, radio, or correspondence courses.[23]

	Great Appeal
Credits for knowledge on examination	44%
Courses at community learning centers	39%
Courses at state colleges	38%
Credits for life experience	32%
TV courses	18%
Correspondence courses	15%
Radio courses	11%

Footnotes

1. Martin, Anita L. Public School Adult Education in Massachusetts, Adult Education Association in Massachusetts, Inc., 1970.

2. "Back to School for Millions of Adults" U.S. News and World Report, April 2, 1973. p. 73.

3. Okes, Imogene E. Participation in Adult Education: Initial Report 1969, National Center for Educational Statistics, Washington, D.C. 1971, p. 19.

4. See pp. II - 643-654 of Volume II, the Technical Report.

5. For an analysis of occupational education in Massachusetts, see: Schaefer, Carl J. and Jacob J. Kaufman, Occupational Education for Massachusetts, Massachusetts Advisory Council on Education, June 1968.

6. Martin, op. cit.

7. Unpublished tables provided by the Educational Testing Service. Data from the Current Population Survey of May 1969.

8. Carp, A., Peterson, R., and Roelfs, P., "Learning Interests and Experiences of Adult Americans," in Cross, K. Patricia and Associates, eds., Planning Non-Traditional Programs: An Analysis of the Issues (San Francisco: Jossey-Bass, 1974).

9. Ibid.

10. Clark, Thomas, Harris, Edward, and Rahaim, Charlotte, "Massachusetts Open University", A Proposal Submitted to the Massachusetts Board of Higher Education, 1973.

11. Clark, op. cit.
The three essential reports are: Jerrold R. Zacharias, "The Open University: A Preliminary Report" (September 1971); James E. Allen, Jr., "An Open University/External Degree Program for Massachusetts" (October 1971); and Report of the President's Committee on the Future University of Massachusetts (Boston: University of Massachusetts, December 1971).

12. See John H. Kendrick (Director of Continuing Education, Middlesex Community College). Influences upon Administrators' Capacities for Self-Determination in the Divisions of Continuing Education in Massachusetts Community Colleges: A Dissertation Proposal Submitted to the Faculty of Boston University School of Education. Boston, May 1973. University Consultants, Inc., appreciates the use of material from this proposal and several valuable discussions with its author. While this data pertains specifically to Massachusetts Community College directors of continuing education, there are good reasons to believe that it is applicable to continuing education in the private sector and other public segments as well. Moreover, the Kendrick findings are consistent with data and conclusions derived independently from the interview research and data of this study.

13. Carnegie Commission on Higher Education, Higher Education: Who Pays? Who Benefits? Who Should Pay?, (New York: McGraw Hill, 1973). and "Public Colleges Urged to Double Tuition Charges", New York Times, October 1, 1973.

14. Comparative Study of Proprietaries and Community Colleges: Programs in San Mateo County, Stanford Research Institute, California, 1967.

15. Erickson, Edward W. , et al, Proprietary Business Schools and Community Colleges: Resource Allocation, Student Needs, and Federal Policies, ICF, Inc., Washington, D.C., 1972.

16. Wilms, Wellford W, Profitmaking and Education, Center for Research and Development in Higher Education, Berkeley, California, 1973.

17. Kendrick, op. cit.

18. An Inventory into the Uses of Instructional Technology, Ford Foundation, New York, 1973.

19. Carp, op. cit., Frank R. Siroky, The Need for External Degree Programs in California, Report No. 2, Commission on External Degree Programs, California State University and Colleges, January 31, 1973, Outreach and Occupational Education in Colorado, A Study Conducted for the Colorado Commission on Higher Education by the Academy for Education Development, Sept. 1972, and Becker Research Corporation, The Market for Continuing Education in Massachusetts, Boston, Mass., 1972.

20. Carp, op. cit.

21. Work in America, Report to the Special Task Force to the Secretary of Health, Education, and Welfare, Prepared under the auspices of the W.E. Upjohn Institute for Employment Research, Washington, D.C., 1973.

22. Becker, op. cit.

23. Becker, op. cit.

Background of the Study

Purpose

In late 1971 a conference was assembled at Henderson House in Weston, Massachusetts, to discuss the current state and future needs for continuing and part-time postsecondary education in the Commonwealth. In attendance at this conference were representatives from the public segments of higher education and from several private institutions as well as from interested state and community agencies and groups. The conference reviewed previous studies that had been made of part-time and continuing education in Massachusetts*, and discussed the national trends toward increased part-time and adult study at the postsecondary level. The conference members concluded that the Massachusetts Advisory Council on Education could constructively mount a study of selected aspects of part-time and continuing postsecondary education in the year 1972-73; a study which would point the way for the development of this sector of education in Massachusetts over the subsequent three- to five-year period.

Scope

Original Boundaries: Institutional Data from Degree-granting Institutions

At meetings following the Weston conference, representatives from MACE, the segmental offices and private institutions specified an initial set of objectives, scope and boundaries of the study. The study would:

(a) Identify program areas of present and potential cooperation between the segments (State Colleges, Community Colleges, University of Massachusetts, Southeastern Massachusetts University, and Lowell Technological Institute) of public higher education and between individual institutions within each segment, in serving part-time or off-campus students, with some attention to the public/private interface.

(b) Identify and inventory those resources and programs available to part-time and new clientele group students for obtaining public higher education.

---

* Levin, Melvin R. and Joseph S. Slavet, Continuing Education, Prepared for the Massachusetts Advisory Council on Education, Lexington, Massachusetts, D.C. Heath: 1970.

Martin, Anita L. Public School Adult Education in Massachusetts, Boston: Adult Education Association in Massachusetts, Inc., 1970.

Published at a later time was Harclerod, Fred F. and Robert J. Armstrong, New Dimensions of Continuing Studies Programs in the Massachusetts State College System, Iowa City, Iowa, American College Testing Program.

(c) Identify populations not now well served by public higher education, specifically actual and potential part-time and new clientele group students.

(d) Identify new programs implemented and/or planned within each segment which could be cooperatively shaped in their early stages to minimize conflict and overlap, and maximize their coverage and complementarity.

The study was not intended to:

(e) Address itself to full-time day programs and how the segments respond to their present full-time populations except insofar as such programs affect part-time or new clientele programs.

(f) Focus on the specific design of an external degree program.

Expanded Boundaries: Student Questionnaire in Degree-Granting Institutions and Analysis of the Peripheral Institutions

Initially the analysis was to cover the universe of two-year and four-year degree-granting public and private postsecondary institutions in the commonwealth. As the study progressed, however, the original scope and boundaries were limiting proper analysis of the state of continuing and part-time postsecondary education. It was seen that the degree-granting institutions interfaced significantly with other types of institutions providing services in this area of adult postsecondary education. Also providing educational services to adults at the postsecondary level are vocational-technical schools, proprietary and other independent institutions, adult evening centers, and home study schools. The boundaries of services among these institutions are not constant but in a state of flux, as the degree-granting institutions begin to offer noncredit courses or as proprietary institutions gain legitimacy through federal scholarship funding, for example. If the educational services were to be looked at from the consumer's point of view, all institutions offering postsecondary courses would need to be considered. Because of limited resources and the exclusion of these other institutions from the original study plan, an exhaustive analysis of them could not be performed. Data was gathered, however, to the extent that these other institutions were willing to respond to questionnaires.

Also in the realm of postsecondary education are employer-based training programs. There is some evidence that trends have been toward greater reliance by many employers on in-house training rather than campus-based college courses. Also, many students in continuing education are reimbursed by their employers for the cost of studies. The connections between students and educational institutions on the one hand and employers on the other hand are thus important factors in the overall system. The extent of cooperation between employers and continuing and part-time programs was traced, and eight case studies were made of major employer training programs.

Several additional tasks were undertaken as the study progressed. For purposes of comparison, information was requested from other state systems and individual institutions. It also became apparent that data from participating institutions was not available in some areas, and other methods would be required to gather needed information. Most importantly, when data from individual institutions on students participating in their programs proved inadequate to the requirements of the study as originally set out, the need was seen for a questionnaire administered directly to the students. Regrettably, a survey of potential but currently excluded clientele groups was not possible within the constraints of the budget.

Given these extensions in the original objectives, the main focus of the study clearly remained on the specific tasks outlined in the MACE study plan and on the universe of degree-granting two-and four-year public and private institutions in the Commonwealth.

The Generation of a Data Base: Sources, Approach and Methodology

Because no data existed or had been compiled in comparable form for all public and private institutions in the State and at a sufficient level of specificity to answer the questions raised in the study, the first task was to generate a new data base on part-time and continuing education in Massachusetts. This task was explicity undertaken in three ways--administration of an institutional data format, of a student questionnaire and on-campus interviews at most degree-granting institutions across the State.

First, a format for a Statewide information system on part-time and continuing education was designed, laying out the variety of types and levels of specificity of information which would be needed for purposes of planning and analysis. Data which had never before been collected in Massachusetts was needed regarding programs and courses offered; who is using them (the nature of part-time clientele) in what regions; policies and practices governing part-time and continuing study; plans for programs; constraints on change; needs for service; cooperation; technology in use, etc. These formats were completed by participating public and private institutions.

Questionnaires in shorter form but asking for similar types of information were sent to the periphery of other institutions involved in postsecondary education: proprietary and independent institutions, adult evening centers, and home study schools. Information on vocational-technical schools was obtained from the Department of Education, Division of Occupational Education.

When it became clear that institutions would not be able to provide adequate information about students in their programs, a second survey instrument was designed and administered: a student questionnaire. The questionnaire was designed to randomly sample students now being served in continuing education and asked a variety of questions about background and motivations. Over 6000 students participated in the survey.

The third major approach to the gathering of information involved on-campus interviews at every public college in the State and every private institution which had a sizable part-time and continuing education program. In addition, a number of people who were involved in the planning, administration and use of part-time and continuing education were also interviewed. Included also were interviews with representatives of "peripheral" institutions and related agencies. The purpose of the interviews was not to gather hard quantitative data but rather to generate a picture of the interplay of institutional missions and the dynamics of the interaction among institutions. Such qualitative data was obtained primarily for the purpose of permitting the formulation of viable recommendations for change. More complete descriptions of the types of information requested in the Institutional Data Formats and Student Questionnaire are in the Study Technical Report, Volume II.

Institutions Included in the Study

The universe of institutions approached in this study includes all core and periphery institutions as defined above. All institutions were requested to supply information about programs and students; to insure completeness and accuracy of the data, several followup efforts were made including telephone or on-site interviews in some cases. Those institutions which responded are included in the analysis. The list of these institutions is presented by geographic service area in the Appendix of the Study Technical Report, Volume II.

MACE Study of Selected Aspects of Higher Education as Related to Part-Time Programs and Inter-Institutional Cooperation

The Study Advisory Committee

As described in the Introduction (Section I), the boundaries nd scope of this study expanded while it was in process. Accordingly, he Study Advisory Committee was expanded to include appropriate persons. The original and expanded membership is listed below.

Original Committee Members

President William G. Dwyer
Board of Regional Community Colleges
Boston, Mass.

Provost Lawrence E. Dennis
Board of Trustees of State Colleges
Boston, Mass.

Representing President Robert Wood
University of Massachusetts

Dr. Franklin Patterson
Advisor to the President and Professor
University of Massachusetts
(resigned from Committee during Study)

Representing President Everett Olsen
Lowell Technological Institute

Dr. William T. Hogan
Dean of the College of Engineering
Lowell Technological Institute
Lowell, Mass.

Representing Dean Richard Fontera
Southeastern Massachusetts University

Mr. David A. Sullivan
Director of College NOW
Southeastern Massachusetts University
North Dartmouth, Mass.

Representing Mr. Patrick McCarthy
Chancellor, Board of Higher Education

Dr. Arthur Corazzini
Deputy Chancellor
Board of Higher Education
Boston, Mass.

Representing Private Colleges and Universities

Dr. Glenn Ferguson
formerly President
Clark University
(resigned from Committee during study)

Dr. Joseph Cronin
Executive Office of Educational Affairs
Commonwealth of Massachusetts
Boston, Mass.

Mrs. Gladys Hardy
formerly Undersecretary
Executive Office of Educational Affairs
Commonwealth of Massachusetts
Boston, Mass.

Representing Clients to be Served

Dr. Barbara Jackson
Director of Evaluation
National Urban League,
Experimental Schools,
Street Academy Project
Boston, Mass.
(formerly Assistant Administrator of Education and Training Division, Model Cities Administration)

Selected Administrators of Continuing Education

Mr. Kenneth Ballou
Dean of University College
Northeastern University
Boston, Mass.

(Continued)

Mr. John H. Kendrick
Director of Continuing Education
Middlesex Community College
Bedford, Mass.

Dr. Joseph Palladino
Dean, Division of Graduate and
Continuing Studies
Framingham State College
Framingham, Mass.

Dr. William C. Venman
Director, Division of Continuing
Education
University of Massachusetts
Amherst, Mass.

Representing MACE

Mr. Morton Godine
Member of MACE
Vice President
Market Forge Company
Everett, Mass.

Dr. Allan S. Hartman
Massachusetts Advisory Council
on Education
Boston, Mass.

Dr. Ronald Jackson
Acting Director
Massachusetts Advisory Council
on Education
Boston, Mass.

Additional Expanded Committee Members

Representing Private Colleges and Universities

Dr. George Hazzard
President
Worcester Polytechnic Institute
Worcester, Mass.

Dr. Beaumont A. Herman
President
Western New England College
Springfield, Mass.

Representing Proprietary and Independent Institutions

Mr. Robert Saltzberg
President
Mass. Assoc. of Business Schools
Newbury Junior College
Boston, Mass.

Mr. Joseph Murphy
President
Mass. Assoc. of Private Schools
Boston, Mass.

Representing President Robert Wood University of Massachusetts

Mr. Peter Edelman
Vice President for Policy and Plans
University of Massachusetts
Boston, Mass.
(replacing Dr. Patterson)

Representing Public School System Adult Education

Mr. Gerald McGrain
Director of Extension Programs
Central Administration
Worcester Public Schools
Worcester, Mass.

Representing Employer-Based Education

Mr. Richard Olsen
Educational Consultant to the
General Director and to the
Associate Director
Massachusetts General Hospital
Boston, Mass.

Representing Private Adult Education Centers

Dr. Sidney Smith
Director
Boston Center for Adult Education
Boston, Mass.

MASSACHUSETTS ADVISORY COUNCIL ON EDUCATION

The Massachusetts Advisory Council on Education is an independent state agency created by special legislation (General Laws, Chapter 15, Section 1H) for the purpose of recommending policies designed to improve the performance of all public education systems in the Commonwealth. As such the Advisory Council provides support for studies which will recommend policies promoting and facilitating the coordination, effectiveness and efficiency of these educational systems.

It is the policy of the Massachusetts Advisory Council on Education that its studies should be disseminated and utilized in a manner which will best serve the public interest. Accordingly, permission is granted to reproduce in whole or part the contents of this report without limitation. The Advisory Council would appreciate an acknowledgment when this report is reproduced or quoted.

Members of the Council

Mary Warner, Chairman
    Engineer, Sunderland
Morton R. Godine, Ph.D., Vice Chairman
    Vice President, Market Forge Company, Everett
Philip C. Beals
    Trustee, Worcester
Shirley R. Lewis
    Attorney at Law, Lewis & Lewis, Attorneys, Taunton
Felix de C. Pereira
    Retired Senior Vice President, First National Bank of Boston
Walter J. Ryan
    Business Manager, International Union of Engineers, Local 4, Roslindale
Nina E. Scarito, M.D.
    Obstetrician, Methuen
Verne W. Vance, Jr.
    Attorney at Law, Foley, Hoag & Eliot, Boston

Ex Officio Members of the Council

Gregory R. Anrig, Ed.D.
    Commissioner of Education
Patrick E. McCarthy
    Chancellor, Board of Higher Education

Legislative Consulting Committee

Mary L. Fonseca
    State Senator, Fall River
John M. Quinlan
    State Senator, Norwood

Legislative Consulting Committee, cont'd.

Walter J. Boverini
State Senator, Lynn
Edward L. Burke
State Senator, Framingham
Michael J. Daly
State Representative, Boston
Nicholas J. Buglione
State Representative, Methuen
Frank J. Matrango
State Representative, N. Adams
Edward A. McColgan
State Representative, Northampton

Staff Members

Ronald B. Jackson, Ed.D.
Acting Director of Research
Allan S. Hartman, Ed.D.
Associate Director of Research
Joan Fitzgerald
Administrative Assistant
Mary Gammons
Head Clerk
Ann Bradley
Senior Clerk Stenographer
Janet Flemming
Senior Clerk Stenographer
Helen Starek
Senior Clerk Stenographer

TABLE OF CONTENTS

Letter of Transmittal i

Foreword. iii

Preface v

Advisory Committee for the Study. vi

Massachusetts Advisory Council on Education viii

PART ONE: SUMMARY REPORT AND RECOMMENDATIONS
(bound in a separate volume)

PART TWO: TECHNICAL REPORT

I. INTRODUCTION AND BACKGROUND OF THE STUDY: DATA COLLECTION, METHODOLOGY, DATA ANALYSIS

A. Purpose. I-1

B. Scope

Original Boundaries: Institutional Data from Degree-Granting Institutions I-1
Expanded Boundaries: Student Questionnaire in Degree-Granting Institutions and Institutional Data on the Education Periphery I-2

C. The Generation of a Data Base: Sources, Approach and Methodology. I-3
Format 1 and Format 2. . . . . I-4
Student Questionnaire. I-6
Institutional Questionnaire to the Education Periphery. I-7

D. Definitions. I-7

E. Institutions Included in the Study I-8

II. THE CONTINUING AND PART-TIME EDUCATION SYSTEM IN MASSACHUSETTS

A. Geographic Service Areas of Institutions

DISCUSSION. II-3
Continuing and Part-time Education Across the State II-4

Determination of Thirteen Geographic Service Areas of the Present System II-8
Analysis for the Thirteen Service Areas II-13

1. Table: Core and Periphery Institutions, With Enrollments, by Geographic Service Area II-15

2. Maps: Residences of Students Attending Each Institution II-37
   Springfield Geographic Service Area (Western Region). II-38
   Pittsfield/North Adams Geographic Service Area (Western Region). II-48
   Amherst/Northampton Geographic Service Area (Western Region). II-51
   Worcester Geographic Service Area (Central Region) II-54
   Fitchburg/Gardner Geographic Service Area (Central Region). II-68
   Framingham Geographic Service Area (Central Region). II-71
   Lynn/Salem Geographic Service Area (Northeast Region). II-74
   Andover/Lowell Geographic Service Area (Northeast Region). II-78
   Burlington/Bedford Geographic Service Area (Northeast Region). II-83
   Brockton Geographic Service Area (Southeast Region). II-85
   Fall River/New Bedford Geographic Service Area (Southeast Region). II-92
   Falmouth/Barnstable Geographic Service Area (Southeast Region). II-96
   Boston Geographic Service Area (Boston Region) II-100

B. Trends in Enrollments and Current Enrollments

DISCUSSION II-133
   Current Enrollments II-133
   Trends in Enrollments in Degree-Granting Institutions. II-136
   Trends in Enrollments in Periphery Institutions . . II-136
   Trends by Geographic Service Area II-137
      Key Events List and Combined Area Trend Charts. . II-138

1. Numerical Data by Institution and Region: Enrollment Totals for Fall 1972 . . . . II-167
   Introduction. II-167
   Methodology for Compilation of Enrollment Totals. II-168

Table: Enrollment Totals by Substate Region and Institution. II-170

2. Introduction and Notes on Institutional Trend Charts II-177

3. Trend Charts for Each Institution. II-179

C. Inventory of Continuing Education Programs and Part-time Study Opportunities in Regular Full-time Programs

DISCUSSION. II-239
Continuing Education Programs. II-239
Part-time Study in Regular Full-time Programs. . . II-248

1. Program Inventory Tables: An Explanation II-249

2. Tables (Organized by Geographic Service Area and Substate Region)
Table: Inventory of Programs Offered, Fall 1972, in Continuing Studies by Subject and Institution
Table: Selected Characteristics of Continuing Education Programs Offered, Fall 1972
Table: Course Registrations in Continuing Education Programs Offered, Fall 1972, by Subject
Service Areas in Western Region. II-252
Service Areas in Central Region. II-266
Service Areas in Northeast Region. II-278
Service Areas in Southeast Region. II-289
Service Areas in Boston Region II-300

3. Part-time Study in Regular Full-time Programs. . . . II-317
General Comments II-318
Analysis by Substate Region. II-320
Table: Credit Hours Enrollment of Part-time Students in Full-time Programs Offered, Fall 1972, by Subject II-326

D. Branch Campuses and Satellite Teaching Centers

DISCUSSION. II-333
Strengths and Weaknesses of Branch Campuses. . . . II-333

1. Table: Off-Campus Activities with Enrollments, Fall 1972. . . . . II-335

2. Map: Off-Campus Activities for Each Institution. . . II-342

E. Cooperation and Coordination

DISCUSSION. II-373

1. Explanation and Key to Cooperation Tables. II-375

2. Tables (Organized by Substate Region). II-376
    Table: Inventory of Cooperative Efforts with Other Institutions of Higher Education
    Table: Inventory of Programs in Cooperation with Agencies or Organizations

F. Transfer Policies

DISCUSSION. II-389

1. Descriptive Analysis II-391
    Credit for Experience. II-392
        Degree-Granting Institutions II-392
        Proprietary and Independent Institutions II-395
    CLEP and Credit by Examination II-396
        Degree-Granting Institutions II-396
        Proprietary and Independent Institutions II-401
    Accessibility of Regular Full-time Courses to Continuing Education Students II-402
    Problems Transferring to Other Institutions. . . . II-405

2. Tables on Transfer Policies. II-406
    Table: For Students Transferring into Continuing Education
    Table: For Students Transferring into Part-time Status in Regular Full-time Programs
    Table: Transfer Policies, Who Sets Them? II-413

G. Outreach, Admissions, Guidance

DISCUSSION. II-423
    Admissions II-423
    Guidance II-423
    Outreach II-424
    The Education Periphery. II-425

1. Descriptive Analysis of Outreach, Admissions and Guidance II-426
    Degree-Granting Institutions II-426
    The Education Periphery Institutions II-432
    Limitations of Data on Outreach Programs II-433

2. Tables on Outreach, Admissions and Guidance. II-433
    Table: Inventory of Continuing Education and Part-time Study Outreach Programs for Women, Elderly and Disadvantaged Clienteles II-434
    Table: Selected Characteristics of Outreach Programs II-437
    Table: Admissions Requirements for Continuing Education Programs II-447

H. Financing, Pricing and Scholarships

DISCUSSION. II-451
The Problem of Obtaining Information on the Financial Structures of Continuing Education Programs II-451
Varied Financial Structures. II-452
Implications of Self-Support and Subordinated Administration II-453
Institutional Costs of Continuing Education Programs II-455
Pricing and Scholarships II-462

1. Table: Comparison of Tuition Charges by Regular Program (Full-time), Part-time (Regular Program), Continuing Education II-465

2. Table: "Salary Ranges and Averages for Continuing Education and Part-time Faculty". II-470

I. Administration and Management of Continuing and Part-time Postsecondary Education

DISCUSSION. II-477
Problems of Data Collection and Analysis II-477
Deans and Directors. II-478
The Continuing Education/Part-time in Regular Programs Mix II-479
Other Administrative Mixes II-481
Status and Source of Faculty II-482
Nontraditional Studies II-483
Common Administrative and Management Problems. . . II-483
Issues in Administration and Management. II-485

1. Table: Administration of Continuing Education by Title of Office II-487

J. Educational Technology

DISCUSSION. II-495
Access II-495
Public Television Access II-496
Television and Radio Commercial Resources and Accessibility. II-498
Use of Existing Programs for Education II-498
Radio Resources and Accessibility II-499
Geographic Service Areas II-500
State and Regional Networks. II-500
Cable Television II-502
Video and Audio Tape Exchange. II-503

1. Inventory of Media Facilities in Massachusetts Institutions of Higher Education II-505

Table: Inventory of Television Studio Facilities in Massachusetts Institutions of Higher Education. II-506
Table: Inventory of Television Recording Facilities in Massachusetts Institutions of Higher Education. II-513

2. Cable TV Locations in Massachusetts. II-519

K. The Postsecondary Education Periphery

1. Geographic Distribution of Institutions (Maps) . . . II-523
Discussion II-523
Maps Locating Periphery Institutions II-524

2. Trends in Enrollments. II-527
Discussion II-527
Proprietary Institutions II-527
Adult Education Programs II-528
Home Study Schools II-528
Independent Schools. II-528
Trend Charts for Periphery Institutions. II-529

3. Inventory of Programs. II-573
Discussion II-573
Proprietary Institutions II-573
Category 1: Business and Office. II-573
Category 2: Trade and Technical. II-575
Category 3: Cosmetology II-576
Category 4: Medical and Health II-577
Category 5: Other Institutions II-578
Public Regional Vocational-Technical Schools and Agricultural Institutes. II-579
Adult Education Programs II-579
Home Study Schools II-580
Table: Inventory of Programs in Proprietary and Independent Institutions II-581
Table: Inventory of Postsecondary Level Courses in Adult Education Programs. II-585
Table: Inventory of Home Study School Programs . . II-588

4. Cooperation and Coordination II-589
Discussion II-589
Proprietary Institutions II-589
Adult Education Programs II-589
Table: Cooperation and Coordination Among Proprietaries. II-590
Table: Cooperation and Coordination Among Adult Education Programs II-593

5. Fees

Discussion II-596

Table: Fees Charged in Proprietary Schools and in Adult Education (By Area) II-597
Table: Fees Charged in Home Study Schools with Massachusetts Students. II-601

6. Student Clienteles. II-602
Discussion. II-602
Proprietary and Independent Institutions. II-602
Adult Education Programs. II-602
Home Study Schools. II-602
Table: Student Clientele in Proprietary and Independent Institutions. II-603
Table: Student Clientele in Adult Education Programs. II-606
Table: Student Clientele in Home Study Schools. . .II-609

L. Employer-Based Education Programs

DISCUSSION II-613
Representative Employer-Group Education Programs. II-614
In-House/Outside Programs II-615
Traditional Higher Education and Employer-Group Interest in an "Open University". II-620

1. Table: Employer Connections with Continuing and Part-time Education Programs in Massachusetts Colleges and Universities II-622

M. Nontraditional Study

DISCUSSION II-629
Antecedents of the Nontraditional Study Movement in Massachusetts. II-629
The New Nontraditional Study Movement II-630
The University Without Walls. II-632
UWW "Spin-Offs" II-633
"Open College" Pilot Programs in Massachusetts. . . II-637
The Proposed MOU. II-638

N. Additional Information on Selected Aspects of Continuing Education

1. Analysis of Educational Exchange Trend Data on Greater Boston (1962-1972) II-643

2. Boston Model Cities Higher Education Program. II-655

III. CURRENT CONTINUING EDUCATION AND PART-TIME CLIENTELE IN MASSACHUSETTS

OVERVIEW. III-1

A. Student Characteristics

1. Profiles of Students in Continuing Education III-5
    Men in Continuing Education III-5
    Women in Continuing Education III-5

2. Participation in Continuing Education III-7

3. Motivations for Enrollment. III-8

4. Reactions to Possible Changes in Current Programs . . III-10

5. Responses to Survey of Continuing Education Students: Simple Frequency Distributions. III-11

6. Responses of Students in Public and Private Institutions: Simple Frequency Distributions. III-24

7. Responses of Students in Two Year and Four Year Institutions: Simple Frequency Distributions. III-37

8. Responses of Students in Community Colleges, State Colleges, Other Public Colleges, Private 2-Year Colleges, and Private 4-Year Colleges: Simple Frequency Distributions III-50

9. The Sample of Continuing Education Students: Sample Design and Reliability of Results. III-60

B. Comparison of Students Characteristics to Census of Population Characteristics

DISCUSSION III-65
    Statewide III-65
    Substate Regions. III-66
    Geographic Service Areas. III-66

1. Table: Comparison of Student Characteristics to Census of Population Characteristics: Statewide . . . III-68

2. Table: Comparison of Student Characteristics to Census of Population Characteristics: Substate Regions III-70

3. Table: Comparison of Student Characteristics to Census of Population Characteristics: by Geographic Service Areas. III-71

C. Special Clientele Groups

1. Elderly III-75
Degree-Granting Institutions. III-75
Proprietary and Independent Institutions. III-77
Adult Education Centers III-78

2. Women III-79
Degree-Granting Institutions. III-79
Community Centers III-84
Conclusion. III-85

3. Disadvantaged III-86
Degree-Granting Institutions. III-86
Adult Education Programs. III-90
Conclusion. III-91

IV. DEMAND FOR CONTINUING AND PART-TIME POST-SECONDARY EDUCATION IN MASSACHUSETTS

A. The "Market" for Continuing and Adult Education

Demand IV-3
Supply IV-4

B. Participation of Adults in Part-time Educational Activities

Evidence of Educational Activities IV-13
Table: Characteristics of Male Participants in Educational Activities IV-14
Table: Characteristics of Female Participants in Educational Activities IV-15
Characteristics of Part-time and Continuing Education Students in Colleges and Universities in Massachusetts and Other States. IV-16
Characteristics of Adult Students in Other Educational Activities in Massachusetts IV-18
Interests of Adults in Educational Activities. IV-19
Apparent Barriers to Learning. IV-21
Demand for Various Educational Formats and Credit. IV-21
Met and Unmet Needs. .IV-23
Participation of Women in Adult Education. IV-24
Social Forces Encouraging Women to Pursue Continuing Education. IV-25
Interests and Needs of Women in Adult Education IV-26
Women in the Labor Force. IV-28
Women in Continuing Education IV-28

C. Licensing and Other Proposed Incentives for Continuing Education

Licensing. IV-37
Salary Increases for Continuing Education. IV-38

D. Continuing Education and the Economy

Education as a Form of Investment for the Individual . . . IV-41
Educated Workers and the Job Market. IV-43
Planning for Continuing Education in Massachusetts IV-47

E. Factors Influencing Demand for Continuing and Part-time Postsecondary Education in Substate Regions in Massachusetts

Western Region IV-52
Central Region IV-54
Northeast Region IV-57
Southeast Region IV-59
Boston Region. IV-62

F. Estimating the Demand for Nontraditional Learning and "Open Universities"

The Complex Character of Demand for Continuing, Part-time and Nontraditional Study. IV-19
Design of a Market Survey (Review of Studies in Other States). IV-70
The Market for an External Degree in Massachusetts IV-73

V. LITERATURE REVIEWS OF SELECTED ASPECTS OF CONTINUING AND PART-TIME POSTSECONDARY EDUCATION IN OTHER STATES (ILLUSTRATIVE, NOT EXHAUSTIVE)

A. Historical Overview of National Trends and Recent Developments V-1

B. Connections to Business and Industry V-4

C. Interinstitutional Cooperation and Coordination. V-8

D. Services for Special Clientele V-12

E. Faculty Unionization V-19

F. Federal Role of Continuing Education V-23

APPENDIXES

Appendix A: Institutions Included in the Study. A-1

Appendix B: List of Publications of the Massachusetts Advisory Council on Education B-1

STRENGTHENING THE ALTERNATIVE POSTSECONDARY EDUCATION SYSTEM: CONTINUING & PART-TIME STUDY IN MASSACHUSETTS

GEORGE J. NOLFI
Study Director

VALERIE I. NELSON
Assistant Director

Volume II – Technical Report

University Consultants, Inc.
for the
Massachusetts Advisory Council on Education

STRENGTHENING THE ALTERNATIVE POSTSECONDARY EDUCATION SYSTEM: CONTINUING AND PART-TIME STUDY IN MASSACHUSETTS

(Volume II - Technical Report)

GEORGE J. NOLFI, JR.
Study Director

VALERIE I. NELSON
Assistant Study Director

September 1973

performed by:
University Consultants, Inc.
45 Hancock Street
Cambridge, Massachusetts 02139

performed for:
Massachusetts Advisory Council on Education
182 Tremont Street
Boston, Massachusetts 02111

STUDY STAFF

DR. GEORGE J. NOLFI, JR. STUDY DIRECTOR
MS. VALERIE I. NELSON, ASSISTANT DIRECTOR

Contributing Research Staff:

Mr. William P. Moore
Mr. Michael Mears
Mr. Lawrence Tell
Dr. Stephen Fischer

Administrative Assistant:

Ms. Christelle K. Paynter

Research Assistants:

Mr. Michael Spence
Ms. Trudy Zimmerman
Mr. Peter Skerry
Ms. Judy Cusick

Prepared Topical Background Papers:

Mr. Robert Saltzberg
Ms. Mary Lonergan
Ms. Cornelia Pistone

Statistical and Data Processing:

Dr. Edward Knipe
Dr. Marcus Lieberman

Map Preparation:

Mr. Kenneth Zolon

Report Production:

Ms. Kathleen Minder
Ms. Karen Geyer

H. Financing, Pricing and Scholarships

DISCUSSION. II-451
The Problem of Obtaining Information on the Financial Structures of Continuing Education Programs II-451
Varied Financial Structures. II-452
Implications of Self-Support and Subordinated Administration II-453
Institutional Costs of Continuing Education Programs II-455
Pricing and Scholarships II-462

1. Table: Comparison of Tuition Charges by Regular Program (Full-time), Part-time (Regular Program), Continuing Education II-465

2. Table: "Salary Ranges and Averages for Continuing Education and Part-time Faculty". II-470

I. Administration and Management of Continuing and Part-time Postsecondary Education

DISCUSSION. II-477
Problems of Data Collection and Analysis II-477
Deans and Directors. II-478
The Continuing Education/Part-time in Regular Programs Mix II-479
Other Administrative Mixes II-481
Status and Source of Faculty II-482
Nontraditional Studies II-483
Common Administrative and Management Problems. . . II-483
Issues in Administration and Management. II-485

1. Table: Administration of Continuing Education by Title of Office II-487

J. Educational Technology

DISCUSSION. II-495
Access II-495
Public Television Access II-496
Television and Radio Commercial Resources and Accessibility. II-498
Use of Existing Programs for Education II-498
Radio Resources and Accessibility. II-499
Geographic Service Areas II-500
State and Regional Networks. II-500
Cable Television II-502
Video and Audio Tape Exchange. II-503

1. Inventory of Media Facilities in Massachusetts Institutions of Higher Education II-505

Table: Inventory of Television Studio Facilities in Massachusetts Institutions of Higher Education. II-506
Table: Inventory of Television Recording Facilities in Massachusetts Institutions of Higher Education. II-513

2. Cable TV Locations in Massachusetts. II-519

K. The Postsecondary Education Periphery

1. Geographic Distribution of Institutions (Maps) . . . II-523
  Discussion II-523
  Maps Locating Periphery Institutions II-524

2. Trends in Enrollments. II-527
  Discussion II-527
    Proprietary Institutions II-527
    Adult Education Programs II-528
    Home Study Schools II-528
    Independent Schools. II-528
  Trend Charts for Periphery Institutions. II-529

3. Inventory of Programs. II-573
  Discussion II-573
    Proprietary Institutions II-573
      Category 1: Business and Office. II-573
      Category 2: Trade and Technical. II-575
      Category 3: Cosmetology II-576
      Category 4: Medical and Health II-577
      Category 5: Other Institutions II-578
    Public Regional Vocational-Technical Schools and Agricultural Institutes. II-579
    Adult Education Programs II-579
    Home Study Schools II-580
  Table: Inventory of Programs in Proprietary and Independent Institutions II-581
  Table: Inventory of Postsecondary Level Courses in Adult Education Programs. II-585
  Table: Inventory of Home Study School Programs . . II-588

4. Cooperation and Coordination II-589
  Discussion II-589
    Proprietary Institutions II-589
    Adult Education Programs II-589
  Table: Cooperation and Coordination Among Proprietaries. II-590
  Table: Cooperation and Coordination Among Adult Education Programs II-593

5. Fees

  Discussion II-596

TABLE OF CONTENTS

Letter of Transmittal i

Foreword. iii

Preface v

Advisory Committee for the Study. vi

Massachusetts Advisory Council on Education viii

PART ONE: SUMMARY REPORT AND RECOMMENDATIONS
(bound in a separate volume)

PART TWO: TECHNICAL REPORT

I. INTRODUCTION AND BACKGROUND OF THE STUDY: DATA COLLECTION, METHODOLOGY, DATA ANALYSIS

A. Purpose. I-1

B. Scope
  Original Boundaries: Institutional Data from Degree-Granting Institutions I-1
  Expanded Boundaries: Student Questionnaire in Degree-Granting Institutions and Institutional Data on the Education Periphery I-2

C. The Generation of a Data Base: Sources, Approach and Methodology. I-3
  Format 1 and Format 2. . . . . I-4
  Student Questionnaire. I-6
  Institutional Questionnaire to the Education Periphery. I-7

D. Definitions. I-7

E. Institutions Included in the Study I-8

II. THE CONTINUING AND PART-TIME EDUCATION SYSTEM IN MASSACHUSETTS

A. Geographic Service Areas of Institutions

DISCUSSION. II-3
  Continuing and Part-time Education Across the State II-4

Determination of Thirteen Geographic Service Areas of the Present System II-8
Analysis for the Thirteen Service Areas II-13

1. Table: Core and Periphery Institutions, With Enrollments, by Geographic Service Area II-15

2. Maps: Residences of Students Attending Each Institution II-37
Springfield Geographic Service Area (Western Region). II-38
Pittsfield/North Adams Geographic Service Area (Western Region). II-48
Amherst/Northampton Geographic Service Area (Western Region). II-51
Worcester Geographic Service Area (Central Region). II-54
Fitchburg/Gardner Geographic Service Area (Central Region). II-68
Framingham Geographic Service Area (Central Region) II-71
Lynn/Salem Geographic Service Area (Northeast Region). II-74
Andover/Lowell Geographic Service Area (Northeast Region). II-78
Burlington/Bedford Geographic Service Area (Northeast Region). II-83
Brockton Geographic Service Area (Southeast Region). II-85
Fall River/New Bedford Geographic Service Area (Southeast Region). II-92
Falmouth/Barnstable Geographic Service Area (Southeast Region). II-96
Boston Geographic Service Area (Boston Region) II-100

B. Trends in Enrollments and Current Enrollments

DISCUSSION II-133
Current Enrollments II-133
Trends in Enrollments in Degree-Granting Institutions. II-136
Trends in Enrollments in Periphery Institutions . . II-136
Trends by Geographic Service Area II-137
Key Events List and Combined Area Trend Charts. . II-138

1. Numerical Data by Institution and Region: Enrollment Totals for Fall 1972 . . . . II-167
Introduction. II-167
Methodology for Compilation of Enrollment Totals. II-168

Table: Enrollment Totals by Substate Region and Institution . . . II-170

2. Introduction and Notes on Institutional Trend Charts . . . II-177

3. Trend Charts for Each Institution . . . II-179

C. Inventory of Continuing Education Programs and Part-time Study Opportunities in Regular Full-time Programs

DISCUSSION . . . II-239
  Continuing Education Programs . . . II-239
  Part-time Study in Regular Full-time Programs . . . II-248

1. Program Inventory Tables: An Explanation . . . II-249

2. Tables (Organized by Geographic Service Area and Substate Region)
  Table: Inventory of Programs Offered, Fall 1972, in Continuing Studies by Subject and Institution
  Table: Selected Characteristics of Continuing Education Programs Offered, Fall 1972
  Table: Course Registrations in Continuing Education Programs Offered, Fall 1972, by Subject
    Service Areas in Western Region . . . II-252
    Service Areas in Central Region . . . II-266
    Service Areas in Northeast Region . . . II-278
    Service Areas in Southeast Region . . . II-289
    Service Areas in Boston Region . . . II-300

3. Part-time Study in Regular Full-time Programs . . . II-317
  General Comments . . . II-318
  Analysis by Substate Region . . . II-320
  Table: Credit Hours Enrollment of Part-time Students in Full-time Programs Offered, Fall 1972, by Subject . . . II-326

D. Branch Campuses and Satellite Teaching Centers

DISCUSSION . . . II-333
  Strengths and Weaknesses of Branch Campuses . . . II-333

1. Table: Off-Campus Activities with Enrollments, Fall 1972 . . . II-335

2. Map: Off-Campus Activities for Each Institution . . . II-342

E. Cooperation and Coordination

DISCUSSION . . . II-373

1. Explanation and Key to Cooperation Tables. II-375

2. Tables (Organized by Substate Region). II-376
    Table: Inventory of Cooperative Efforts with Other Institutions of Higher Education
    Table: Inventory of Programs in Cooperation with Agencies or Organizations

F. Transfer Policies

DISCUSSION. II-389

1. Descriptive Analysis II-391
    Credit for Experience. II-392
        Degree-Granting Institutions II-392
        Proprietary and Independent Institutions II-395
    CLEP and Credit by Examination II-396
        Degree-Granting Institutions II-396
        Proprietary and Independent Institutions II-401
    Accessibility of Regular Full-time Courses to Continuing Education Students II-402
    Problems Transferring to Other Institutions. . . . II-405

2. Tables on Transfer Policies. II-406
    Table: For Students Transferring into Continuing Education
    Table: For Students Transferring into Part-time Status in Regular Full-time Programs
    Table: Transfer Policies, Who Sets Them? II-413

G. Outreach, Admissions, Guidance

DISCUSSION. II-423
    Admissions II-423
    Guidance II-423
    Outreach II-424
    The Education Periphery. II-425

1. Descriptive Analysis of Outreach, Admissions and Guidance II-426
    Degree-Granting Institutions II-426
    The Education Periphery Institutions II-432
    Limitations of Data on Outreach Programs II-433

2. Tables on Outreach, Admissions and Guidance. II-433
    Table: Inventory of Continuing Education and Part-time Study Outreach Programs for Women, Elderly and Disadvantaged Clienteles II-434
    Table: Selected Characteristics of Outreach Programs II-437
    Table: Admissions Requirements for Continuing Education Programs II-447

Table: Fees Charged in Proprietary Schools and in Adult Education (By Area) II-597
Table: Fees Charged in Home Study Schools with Massachusetts Students. II-601

6. Student Clienteles. II-602
Discussion. II-602
Proprietary and Independent Institutions. II-602
Adult Education Programs. II-602
Home Study Schools. II-602
Table: Student Clientele in Proprietary and Independent Institutions. II-603
Table: Student Clientele in Adult Education Programs. II-606
Table: Student Clientele in Home Study Schools. . .II-609

L. Employer-Based Education Programs

DISCUSSION II-613
Representative Employer-Group Education Programs. II-614
In-House/Outside Programs II-615
Traditional Higher Education and Employer-Group Interest in an "Open University". II-620

1. Table: Employer Connections with Continuing and Part-time Education Programs in Massachusetts Colleges and Universities II-622

M. Nontraditional Study

DISCUSSION II-629
Antecedents of the Nontraditional Study Movement in Massachusetts. II-629
The New Nontraditional Study Movement II-630
The University Without Walls. II-632
UWW "Spin-Offs" II-633
"Open College" Pilot Programs in Massachusetts. . .II-637
The Proposed MOU. II-638

N. Additional Information on Selected Aspects of Continuing Education

1. Analysis of Educational Exchange Trend Data on Greater Boston (1962-1972) II-643

2. Boston Model Cities Higher Education Program. II-655

III. CURRENT CONTINUING EDUCATION AND PART-TIME CLIENTELE IN MASSACHUSETTS

OVERVIEW. III-1

A. Student Characteristics

1. Profiles of Students in Continuing Education III-5
   - Men in Continuing Education III-5
   - Women in Continuing Education III-5
2. Participation in Continuing Education III-7
3. Motivations for Enrollment. III-8
4. Reactions to Possible Changes in Current Programs . . III-10
5. Responses to Survey of Continuing Education Students: Simple Frequency Distributions. III-11
6. Responses of Students in Public and Private Institutions: Simple Frequency Distributions. III-24
7. Responses of Students in Two Year and Four Year Institutions: Simple Frequency Distributions. III-37
8. Responses of Students in Community Colleges, State Colleges, Other Public Colleges, Private 2-Year Colleges, and Private 4-Year Colleges: Simple Frequency Distributions III-50
9. The Sample of Continuing Education Students: Sample Design and Reliability of Results. III-60

B. Comparison of Students Characteristics to Census of Population Characteristics

DISCUSSION III-65
   - Statewide III-65
   - Substate Regions. III-66
   - Geographic Service Areas. III-66

1. Table: Comparison of Student Characteristics to Census of Population Characteristics: Statewide . . . III-68
2. Table: Comparison of Student Characteristics to Census of Population Characteristics: Substate Regions III-70
3. Table: Comparison of Student Characteristics to Census of Population Characteristics: by Geographic Service Areas. III-71

C. Special Clientele Groups

1. Elderly III-75
    Degree-Granting Institutions. III-75
    Proprietary and Independent Institutions. III-77
    Adult Education Centers III-78

2. Women III-79
    Degree-Granting Institutions. III-79
    Community Centers III-84
    Conclusion. III-85

3. Disadvantaged III-86
    Degree-Granting Institutions. III-86
    Adult Education Programs. III-90
    Conclusion. III-91

IV. DEMAND FOR CONTINUING AND PART-TIME POST-SECONDARY EDUCATION IN MASSACHUSETTS

A. The "Market" for Continuing and Adult Education

Demand IV-3
Supply IV-4

B. Participation of Adults in Part-time Educational Activities

Evidence of Educational Activities IV-13
    Table: Characteristics of Male Participants in Educational Activities IV-14
    Table: Characteristics of Female Participants in Educational Activities IV-15
Characteristics of Part-time and Continuing Education Students in Colleges and Universities in Massachusetts and Other States. IV-16
Characteristics of Adult Students in Other Educational Activities in Massachusetts IV-18
Interests of Adults in Educational Activities. IV-19
Apparent Barriers to Learning. IV-21
Demand for Various Educational Formats and Credit. IV-21
Met and Unmet Needs. .IV-23
Participation of Women in Adult Education. IV-24
    Social Forces Encouraging Women to Pursue Continuing Education. IV-25
    Interests and Needs of Women in Adult Education IV-26
    Women in the Labor Force. IV-28
    Women in Continuing Education IV-28

C. Licensing and Other Proposed Incentives for Continuing Education

Licensing. IV-37
Salary Increases for Continuing Education. IV-38

D. Continuing Education and the Economy

Education as a Form of Investment for the Individual . . .IV-41
Educated Workers and the Job Market. IV-43
Planning for Continuing Education in Massachusetts IV-47

E. Factors Influencing Demand for Continuing and Part-time Postsecondary Education in Substate Regions in Massachusetts

Western Region IV-52
Central Region IV-54
Northeast Region IV-57
Southeast Region IV-59
Boston Region. IV-62

F. Estimating the Demand for Nontraditional Learning and "Open Universities"

The Complex Character of Demand for Continuing, Part-time and Nontraditional Study. IV-69
Design of a Market Survey (Review of Studies in Other States). IV-70
The Market for an External Degree in Massachusetts IV-73

V. LITERATURE REVIEWS OF SELECTED ASPECTS OF CONTINUING AND PART-TIME POSTSECONDARY EDUCATION IN OTHER STATES (ILLUSTRATIVE, NOT EXHAUSTIVE)

A. Historical Overview of National Trends and Recent Developments V-1

B. Connections to Business and Industry V-4

C. Interinstitutional Cooperation and Coordination. V-8

D. Services for Special Clientele V-12

E. Faculty Unionization V-19

F. Federal Role of Continuing Education V-23

APPENDIXES

Appendix A: Institutions Included in the Study. A-1

Appendix B: List of Publications of the Massachusetts Advisory Council on Education B-1

UNIVERSITY CONSULTANTS, INC.
45 Hancock St., Cambridge, Mass. 02139 (617) 491-5828

LETTER OF TRANSMITTAL

Mrs. Mary Warner, Chairman
Massachusetts Advisory Council on Education
182 Tremont Street
Boston, Massachusetts 02111

Dear Mrs. Warner:

In 1971 Dr. William Gaige, then Research Director for the Advisory Council conducted a conference at Henderson House to discuss the problems of continuing and part-time higher education in Massachusetts. Educational leaders from public and private institutions who were present agreed that the subject warranted an Advisory Council study, but debated which of several troublesome issues should be the focus of such a study. In the several months that followed, the issues to be addressed became defined, and we were approached to carry out an appropriate study.

The study was to address selected aspects of continuing and part-time higher education and of interinstitutional cooperation and coordination in the Commonwealth covering both public and private institutions. Its purposes were two: First, because the information then available was totally inadequate for intelligent policy formulation, a data base was to be generated which would permit detailed and objective analysis of the current "system" of continuing and part-time education in Massachusetts. Second, the study should present to the citizenry and to education policymakers a set of recommendations for public and private institutional policies for the 1970's.

During the course of this Study we gathered extensive data from all public and private institutions across the State which have continuing or part-time education programs. We wish to thank the many individuals in these institutions for their labor and assistance in generating information at a level of accuracy, detail and specificity which has never before been compiled on this subject in this State. Particular thanks are due the three public segmental offices (University of Massachusetts, State College System, Board of Regional Community Colleges) and the Offices of the Association of Independent Colleges and Universities of Massachusetts. Thanks are also due the many proprietary institutions, school system adult education programs, vocational schools and home study schools which responded to our mail and telephone requests for information.

Further, extensive interviews and consultations were conducted. I wish personally to thank the many educational leaders throughout the State with whom I have spoken during the year. Presidents, deans, continuing education directors, faculty and students at every campus visited (which included most degree-granting institutions mentioned in the Study) were most willing to give their time and suggestions. Representatives of proprietary institutions, adult education centers and programs, businessmen and knowledgeable private citizens were similarly cooperative. The candid and astute comments made in these interviews are reflected in what we have said and suggested in the Volume I Summary Report. However, responsibility for the conclusions and recommendations rests with the authors.

We want to also express here our appreciation to Dr. Allan Hartman and Dr. Ronald Jackson of the Council staff who have been during this Study both concerned and sensitively informed critics and great friends. The same thanks are due Dr. William Gaige, formerly Council Research Director, who personally supervised this Study in its early stages. Council member Morton Godine has taken a special interest in the Study all along, and we wish to thank him for the Council perspective he reaffirmed.

Appreciation is also extended to Secretary of Educational Affairs Joseph Cronin and to Chancellor of Higher Education Patrick McCarthy for their support of the Study, and their advice.

We want to make a special point of thanking the members of the Study Advisory Committee who have given helpful counsel, both individually and collectively, throughout the Study and particularly in its final stages. From their familiar names and reputations any reader can imagine the lively and tough-minded manner in which they provided a sounding board for our ideas.

Given these efforts, which describe a Statewide exercise of considerable intensity and depth, we hope that the Study will be used as an instrument of action and not simply a document for reflection. This has been our intent in preparing it.

Hopefully, we have written the preface to a process that will continue beyond the completion of this report. In short, we would urge the Council to view the submission of the attached documents as not a final, but a first step in addressing these important issues in Massachusetts' educational policy. This Study, quite frankly, will not have served the people of the Commonwealth well unless its recommendations, or modifications thereof that emerge from policy debate, are implemented.

Sincerely,

George J. Nolfi, Jr.
President

FOREWORD

Here the Advisory Council presents a powerful report that challenges the Establishment to move and to commit. A system called continuing education is, for the first time, fully explored and its potential revealed. The Advisory Council on Education is charged by law to "analyze, plan and evaluate the programs and systems used by all agencies for public education in the Commonwealth ... and to recommend such policies as to promote and facilitate coordination, effectiveness, and efficiency...." Since its inception in 1966, it has conducted a number of comprehensive studies of programs and systems at all levels of education.

Recognizing that continuing and part-time study at the college level involved more than 110,000 students and had received limited public policy attention, while 215,000 full-time day students were the focus of the extensive planning efforts of several Statewide bodies and agencies, local consortia of institutions, etc., the Council determined that a study of continuing and part-time programs and needs would be in the public interest.

In mid-1972, the Council contracted with Dr. George Nolfi, President of University Consultants, Inc. to direct a study through his firm. The result of the efforts of Dr. Nolfi and his associates, particularly Ms. Nelson, is comprehensive -- certainly the most thorough effort by any state so far to describe and rationalize, from a consumer's point of view, the extensive continuing and part-time postsecondary educational activities under way and provide the guidelines for innovative yet pragmatic public policy. The Study's focus is Massachusetts, but its analytical perspective, its insights and its recommendations are applicable in any state.

Centering on the consumer has shaped both the scope of analysis and the thrust of the recommendations. The Study argues that continuing and part-time education, while having grown in a haphazard manner, now constitutes in some respects a base for an alternative postsecondary education system geared to the adult population's needs. The Study's recommendation that this alternative "system" should be strengthened by State policy to encourage its growth as an alternative more suited to adult needs than the traditional full-time day model, is at once a bold design for higher education reform and a pragmatic proposal for building on what we already have.

The Study had two basic tasks: The first was to generate a data base on continuing and part-time study which would provide educational policy-makers with the first detailed information on this sector of postsecondary education ever gathered in the State. This task has been accomplished in the Technical Report (Volume II) with such depth and specificity, that public policy debate regarding this sector can be raised to totally new realms.

The second task of the Study was to render appraisals, judgments, and recommendations regarding public and institutional policies for continuing and part-time education in the 1970's. This territory has been charted in the Summary Report (Volume I) with a set of recommendations and supporting analysis which are a manifesto for bold and positive educational reform tempered by a reasoned and user-oriented public policy perspective.

The scope and boundaries of the Study were changed, as described in the Introduction, as the Study progressed upon recommendation of the Study Director. The comprehensive coverage of private insitutions, the exceptionally detailed student clientele analysis and comparison to Census data, the inclusion of proprietary institutions in the Study, and the investigation of employer-based postsecondary education are but four examples of this expanded scope which were endorsed by the Council because of their importance to current issues of educational policy.

As this Study progressed, some data and recommendations were made available to operating and planning agencies, and there is evidence that the Study has already made an impact. The report represents a comprehensive analysis of facts and data and a timely agenda for lively debate and dramatic action. Begin that debate, the Advisory Council urges, and let it sweep the way to implementation.

Ronald B. Jackson
Acting Director of Research
Advisory Council on Education

PREFACE

The completion of a major policy study is just the beginning of a process through which issues raised may be prudently addressed. All too often a study's final report is seen as a point of conclusion--a point of view which often makes such a study effort relatively useless.

It is our view that this Study has produced the facts and figures, detailed the qualitative aspects, and defined the policy parameters and options to permit for the first time logical and consumer-based policy implementation in the area of continuing and part-time education. The debate and decision and action must now ensue. It must involve the several State agencies concerned with educational policy, the public and private degree-granting institutions, the professionals and the lay boards, the proprietary institutions, vocational schools and school system adult education programs, the Legislature and various private groups and organizations.

We believe that our analysis has been thorough, our findings well grounded in demonstrable fact, and our recommendations soundly formulated in the public's best interest. We believe it essential that the Commonwealth use this report as a guide for effectively meeting the postsecondary educational needs and aspirations of its adult population.

The overall report is presented in two volumes. Volume I, the Summary Report and Recommendations, provides an analytical overview of the major findings, interpretation of their meaning, conclusions drawn from these findings, and recommendations about what needs to be done in the Commonwealth in continuing and part-time education if the public interest is to be served.

Volume II, the Technical Report, provides over 800 pages of detailed facts, figures, and descriptive prose. Our intent in this volume has been to present data, findings and conclusions. We have deliberately made Volume II a descriptive analysis (leaving our prescriptive interpretations to Volume I) so it could serve as a reference document, placing a floor of fact under whatever policy options are presented for debate. It provides the objective information against which policy options can be evaluated, rational planning decisions made, and logical actions implemented.

George J. Nolfi, Jr.
Study Director
President,
University Consultants, Inc.

MACE Study of Selected Aspects of Higher Education as Related to Part-Time Programs and Inter-Institutional Cooperation

The Study Advisory Committee

As described in the Introduction (Section I), the boundaries and scope of this study expanded while it was in process. Accordingly, the Study Advisory Committee was expanded to include appropriate persons. The original and expanded membership is listed below.

Original Committee Members

President William G. Dwyer
Board of Regional Community Colleges
Boston, Mass.

Provost Lawrence E. Dennis
Board of Trustees of State Colleges
Boston, Mass.

Representing President Robert Wood
University of Massachusetts

Mr. Peter Edelman
Vice President for Policy and Plans
University of Massachusetts
Boston, Mass.

Representing President Everett Olsen
Lowell Technological Institute

Dr. William T. Hogan
Dean of the College of Engineering
Lowell Technological Institute
Lowell, Mass.

Representing Dean Richard Fontera
Southeastern Massachusetts University

Mr. David A. Sullivan
Director of College NOW
Southeastern Massachusetts University
North Dartmouth, Mass.

Representing Mr. Patrick McCarthy
Chancellor, Board of Higher Education

Dr. Arthur Corazzini
Deputy Chancellor
Board of Higher Education
Boston, Mass.

Representing Private Colleges
and Universities

Dr. Glenn Ferguson
formerly President
Clark University
(resigned from Committee
during study)

Dr. Joseph Cronin
Executive Office of
Educational Affairs
Commonwealth of Massachusetts
Boston, Mass.

Mrs. Gladys Hardy
formerly Undersecretary
Executive Office of
Educational Affairs
Commonwealth of Massachusetts
Boston, Mass.

Representing Clients to
be Served

Dr. Barbara Jackson
Director of Evaluation
National Urban League,
Experimental Schools,
Street Academy Project
Boston, Mass.
(formerly Assistant
Administrator of
Education and Training
Division, Model Cities
Administration)

(continued)

Selected Administrators of Continuing Education

Mr. Kenneth Ballou
Dean of University College
Northeastern University
Boston, Mass.

Mr. John H. Kendrick
Director of Continuing Education
Middlesex Community College
Bedford, Mass.

Dr. Joseph Palladino
Dean, Division of Graduate and
Continuing Studies
Framingham State College
Framingham, Mass.

Dr. William C. Venman
Director, Division of Continuing
Education
University of Massachusetts
Amherst, Mass.

Representing MACE

Mr. Morton Godine
Member of MACE
Vice President
Market Forge Company
Everett, Mass.

Dr. Allan S. Hartman
Massachusetts Advisory Council
on Education
Boston, Mass.

Dr. Ronald Jackson
Acting Director
Massachusetts Advisory Council
on Education
Boston, Mass.

Additional Expanded Committee Members

Representing Private Colleges and Universities

Dr. George Hazzard
President
Worcester Polytechnic Institute
Worcester, Mass.

Dr. Beaumont A. Herman
President
Western New England College
Springfield, Mass.

Representing Proprietary and Independent Institutions

Mr. Robert Saltzberg
President
Mass. Assoc. of Business Schools
Newbury Junior College
Boston, Mass.

Mr. Joseph Murphy
President
Mass. Assoc. of Private Schools
Boston, Mass.

Representing Public School System Adult Education

Mr. Gerald McGrain
Director of Extension Programs
Central Administration
Worcester Public Schools
Worcester, Mass.

Representing Employer-Based Education

Mr. Richard Olsen
Educational Consultant to the
General Director and to the
Associate Director
Massachusetts General Hospital
Boston, Mass.

Representing Private Adult Education Centers

Dr. Sidney Smith
Director
Boston Center for Adult Education
Boston, Mass.

MASSACHUSETTS ADVISORY COUNCIL ON EDUCATION

The Massachusetts Advisory Council on Education is an independent state agency created by special legislation (General Laws, Chapter 15, Section 1H) for the purpose of recommending policies designed to improve the performance of all public education systems in the Commonwealth. As such the Advisory Council provides support for studies which will recommend policies promoting and facilitating the coordination, effectiveness and efficiency of these educational systems.

It is the policy of the Massachusetts Advisory Council on Education that its studies should be disseminated and utilized in a manner which will best serve the public interest. Accordingly, permission is granted to reproduce in whole or part the contents of this report without limitation. The Advisory Council would appreciate an acknowledgment when this report is reproduced or quoted.

Members of the Council

Mary Warner, Chairman
    Engineer, Sunderland
Morton R. Godine, Ph.D., Vice Chairman
    Vice President, Market Forge Company, Everett
Philip C. Beals
    Trustee, Worcester
Shirley R. Lewis
    Attorney at Law, Lewis & Lewis, Attorneys, Taunton
Felix de C. Pereira
    Retired Senior Vice President, First National Bank of Boston
Walter J. Ryan
    Business Manager, International Union of Engineers, Local 4, Roslindale
Nina E. Scarito, M.D.
    Obstetrician, Methuen
Verne W. Vance, Jr.
    Attorney at Law, Foley, Hoag & Eliot, Boston

Ex Officio Members of the Council

Gregory R. Anrig, Ed.D.
    Commissioner of Education
Patrick E. McCarthy
    Chancellor, Board of Higher Education

Legislative Consulting Committee

Mary L. Fonseca
    State Senator, Fall River
John M. Quinlan
    State Senator, Norwood

Legislative Consulting Committee, cont'd.

Walter J. Boverini
State Senator, Lynn
Edward L. Burke
State Senator, Framingham
Michael J. Daly
State Representative, Boston
Nicholas J. Buglione
State Representative, Methuen
Frank J. Matrango
State Representative, N. Adams
Edward A. McColgan
State Representative, Northampton

Staff Members

Ronald B. Jackson, Ed.D.
Acting Director of Research
Allan S. Hartman, Ed.D.
Associate Director of Research
Joan Fitzgerald
Administrative Assistant
Mary Gammons
Head Clerk
Ann Bradley
Senior Clerk Stenographer
Janet Flemming
Senior Clerk Stenographer
Helen Starek
Senior Clerk Stenographer

BEST COPY AVAILABLE

I. INTRODUCTION AND BACKGROUND OF THE STUDY: DATA COLLECTION, METHODOLOGY, DATA ANALYSIS

A. Purpose . . . I-1

B. Scope
  Original Boundaries: Institutional Data from Degree-Granting Institutions . . . I-1
  Expanded Boundaries: Student Questionnaire in Degree-Granting Institutions and Institutional Data on the Education Periphery . . . I-2

C. The Generation of a Data Base: Sources, Approach and Methodology . . . I-3
  Format 1 and Format 2 . . . I-4
  Student Questionnaire . . . I-6
  Institutional Questionnaire to the Education Periphery . . . I-7

D. Definitions . . . I-7

E. Institutions Included in the Study . . . I-8

I. INTRODUCTION AND BACKGROUND OF THE STUDY

A. Purpose

In late 1971 a conference was assembled at Henderson House in Weston, Massachusetts, to discuss the current state and future needs for continuing and part-time postsecondary education in the Commonwealth. In attendance at this conference were representatives from the public segments of higher education and from several private institutions as well as from interested state and community agencies and groups. The conference reviewed previous studies that had been made of part-time and continuing education in Massachusetts*, and discussed the national trends toward increased part-time and adult study at the postsecondary level. The conference members concluded that the Massachusetts Advisory Council on Education could constructively mount a study of selected aspects of part-time and continuing postsecondary education in the year 1972-73; a study which would point the way for the development of this sector of education in Massachusetts over the subsequent three- to five-year period.

B. Scope

Original Boundaries: Institutional Data from Degree-granting Institutions

At meetings following the Weston conference, representatives from MACE, the segmental offices and private institutions specified an initial set of objectives, scope and boundaries of the study. The study would:

(a) Identify program areas of present and potential cooperation between the segments (State Colleges, Community Colleges, University of Massachusetts, Southeastern Massachusetts University, and Lowell Technological Institute) of public higher education between individual institutions within each segment, in serving part-time or off-campus students, with some attention to the public/private interface.

(b) Identify and inventory those resources and programs available to part-time and new clientele group students for obtaining public higher education.

(c) Identify populations not now well served by public higher education, specifically actual and potential part-time and new clientele groups students.

---

* Levin, Melvin R. and Joseph S. Slavet, Continuing Education, Prepared for the Massachusetts Advisory Council on Education, Lexington, Massachusetts, D.C. Heath: 1970.
Martin, Anita L. Public School Adult Education in Massachusetts, Boston: Adult Education Association in Massachusetts, Inc., 1970.
Published at a later time was Harclerod, Fred F. and Robert J. Armstrong, New Dimensions of Continuing Studies Programs in the Massachusetts State College System, Iowa City, Iowa, American College Testing Program.

(d) Identify new programs implemented and/or planned within each segment which could be cooperatively shaped in their early stages to minimize conflict and overlap, and maximize their coverage and complementarity.

The study was not intended to:

(e) Address itself to full-time day programs and how the segments respond to their present full-time populations except insofar as such programs affect part-time or new clientele programs.

(f) Focus on the specific design of an external degree program.

Initially the analysis was to cover the universe of two-year and four-year degree-granting public and private postsecondary institutions in the Commonwealth. In the case of the public institutions, cooperation with the study was assured by the support of the central offices of the five public segments. Accurate and complete data necessary for the purposes of the study would be provided by all member institutions and the data gathering would be coordinated through the central segmental offices once the information needed was specified.

In the case of the private institutions, however, the degree of participation and cooperation with the study was determined by each institution. Although the Association of Independent Colleges and Universities in Massachusetts had pledged its full support, its member institutions were represented in the study only to the extent that cooperation was forthcoming from each institution. The response was high: In total 30 public and 40 private institutions with formal continuing or part-time programs participated fully in the study.

Expanded Boundaries: Student Questionnaire in Degree-Granting Institutions and Institutional Data on the Education Periphery

As the study progressed, however, the original scope and boundaries were limiting proper analysis of the state of continuing and part-time postsecondary education. It was seen that the degree-granting institutions interfaced significantly with other types of institutions providing services in this area of adult postsecondary education. Also providing educational services to adults at the postsecondary level are vocation-technical schools, proprietary and other independent institutions, adult evening centers, and home study schools. The boundaries of services among these institutions are not constant but in a state of flux, as the degree-granting institutions begin to offer noncredit courses or as proprietary institutions gain legitimacy through federal scholarship funding, for example. If the educational services were to be looked at from the consumer's point of view, all institutions offering postsecondary courses would need to be considered. Because of limited resources and the exclusion of these other institutions from the original study plan, an exhaustive analysis of them could not be performed. Data was gathered, however, to the extent that the peripheral institutions were willing to respond to questionnaires.

Also in the realm of postsecondary education are employer-based training programs. There is some evidence that trends have been toward greater reliance by many employers on in-house training rather than campus-based college courses. And yet many students in continuing education are reimbursed by their employers. The connections between students and educational institutions on the one hand and employers on the other hand are thus important factors in the overall system. The extent of cooperation between employers and continuing and part-time programs was traced and eight case studies were made of major employer training programs.

Several additional tasks were also undertaken as the study progressed. The data gathered from Massachusetts institutions could be constructively compared to information about what other state systems and individual institutions were doing across the country in the area of part-time and continuing postsecondary education. Thus information was requested from other systems and institutions and a general literature search was conducted.

It also became apparent that data from participating institutions was not available in some areas, and other methods would be required to gather needed information. Most importantly, when data from individual institutions on students participating in their programs proved inadequate to the requirements of the study as originally set out, the need was seen for a questionnaire administered directly to the students. Regrettably, a survey of potential but currently excluded clientele groups was not possible within the constraints of the budget.

Given these extensions in the original objectives, the main focus of the study clearly remains on the specific tasks outlined in the MACE study plan and on the universe of degree-granting two- and four-year public and private institutions in the Commonwealth.

C. The Generation of a Data Base: Sources, Approach and Methodology

Because no data existed or had been compiled in comparable form for all public and private institutions in the State at a sufficient level of specificity to answer the questions raised in the study, the first task was to generate a new data base on part-time and continuing education in Massachusetts. This task was explicitly undertaken in three ways--administration of an institutional data format and of a student questionnaire and on-campus interviews at most degree-granting institutions across the state. First, a format for a statewide information system on part-time and continuing education was designed, laying out the variety of types and levels of specificity of information which would be needed for purposes of planning and analysis.

Data which had never before been collected in Massachusetts was needed regarding programs and courses offered; who is using them (the nature of part-time clientele) in what regions; policies and practices governing part-time and continuing study; plans for programs; constraints on change; needs for services; cooperation; technology in use, etc. These formats were completed by participating public and private institutions.

In the case of the private institutions, the cooperation of AICUM was asked and obtained. In the case of the public institutions, the pledged cooperation to insure the accuracy of the data provided by the institutions in each segment by each central office was relied upon. AICUM and the segmental offices were of great assistance in the information gathering process. Data from individual institutions is varied in its accuracy and comprehensiveness, depending upon the capacity and precision of the management information at the institution. Some institutions are managed in the manner which permits relatively easy access to a variety of kinds of data on the nature of programs offered, the costs of programs, the types of students, and other characteristics. At other institutions such data is not always readily available. Questionnaires in shorter form but asking for similar types of information were sent to the periphery of other institutions involved in postsecondary education: proprietary and independent institutions, adult evening centers, and home study schools. Information on vocational-technical schools was obtained from the Department of Education, Division of Occupational Education.

When it became clear that institutions would not be able to provide adequate information about students in their programs, a second survey instrument was designed and administered: a student questionnaire. The questionnaire was designed to randomly sample students now being served in continuing education and asked a variety of questions about background and motivations. Over 6000 students participated in the survey.

The third major approach to the gathering of information involved on-campus interviews at every public college in the state and every private institution which had a sizable part-time and continuing education program. In addition, a number of people who were involved in the planning, administration and use of part-time and continuing education were also interviewed. Included also were interviews with representatives of "peripheral" institutions and related agencies. The purpose of the interviews was not to gather hard quantitative data but rather to generate a picture of the interplay of institutional missions and the dynamics of the interaction among institutions that shapes the sector. Such qualitative data was obtained primarily for the purpose of permitting the formulation of viable recommendations for change. More complete descriptions of the types of information requested in the Institutional Data Formats and Student Questionnaire are given below.

Format 1 and Format 2

The universe of part-time study programs, options, students, etc. was divided into two parts and a general thrust of questions was tailored into a specific, but comparable, format for each.

Format #1 dealt with the subuniverse of programs and students defined by "Continuing Education" within institutions, usually clearly separate from the Regular Budget Day Programs and students. Format #2 dealt with the subuniverse of part-time study options, programs and students which are part of or are enrolled in the Regular Day Programs.

Both formats asked for information of two kinds. First, there were various charts and tables of quantitative information on programs, students, etc. These are "inventory" and "profile" data requirements needed to describe and permit analysis of the current state and character of part-time and continuing education. Second, there were prose questions to obtain the qualitative data important for placing quantitative data in perspective. What was needed in these sections were specific, clear statements of policies, operating practices, etc. and "best judgements" about a variety of matters by the appropriate, knowledgeable individuals on each campus.

Each format was divided into three sections:

Part I: Inventory of Program and Course Characteristics in Continuing Education and of Opportunities for Part-time Study in Regular Full-time Programs.

Part II: Characteristics of Students in Continuing Education and of Part-time Students in Regular Full-time Programs

Part III: General Program and Policy Information for Continuing Education and Part-time Study Options in the Regular Full-time Programs

Laced through the three parts were questions in table and prose form about the following major topics:

program scope and comprehensiveness: What degree, certificate, noncredit and special conferences or programs are currently available to the part-time student? What new programs are planned and what programs have been discontinued and why? This information would be used to define the opportunities available to a student in a given area and to find gaps and duplication of programs among schools.

trends in enrollment: What have been course enrollments and registrations, numbers of courses, fees and budgets over the last ten years? This information would be used to trace trends in part-time and continuing education, growth of programs and effects of competition among schools.

interinstitutional cooperation and coordination: What cooperative or joint programs exist or are planned with other public and private institutions (educational, governmental, business or other) which effect part-time students? This information would be used to identify program areas of present and potential cooperation among institutions.

characteristics of students: What types of students enroll in programs, where do they live, what future trends are expected in student needs? The information supplied here would prove inadequate to inventory student characteristics, but it would be used to map geographic service areas in continuing and part-time education on the basis of residence of students enrolled. It would also be used to define the view of the administrations as to characteristics of their student clientele.

financing, pricing and scholarships: What are the financial arrangements of the program? What is the tuition fee, what costs does this cover, what scholarships are available, etc.? This information would be used to delineate the use of funds and relative fee structures among institutions and their effect on students.

use of technology and other nontraditional formats: What types of educational technology are in use for the part-time and continuing education students and what nontraditional teaching formats are being tried? This information would be used to determine the extent to which institutions individually and as a whole respond to student and community needs through innovative methods.

outreach, admissions, guidance, and services to special clientele: What policies of outreach to special clientele, admissions requirements, and counselling services exist to serve the student? This information would be used to determine the extent to which institutions individually and as a whole respond to student and community needs.

transfer policies and practices: What policies exist to facilitate or limit the transfer of credit and how many students are affected? This information would be used to delineate the possibilities for degree certification for students out of school for several years or those who have moved.

administrative structures: How are part-time and continuing education programs administered, how much support staff is available, who makes decisions about programs? This information would be used to define the relationship of part-time and continuing education to full-time education as a whole and possibilities for flexibility or limitations to initiatives.

The Student Questionnaire

Four types of questions were asked in the questionnaire:

I. Personal and family demographic information (age, sex, ethnic group, previous education, occupation, income, industry, father's and mother's education and occupations, veterans status, occupation data for spouse). This information would be used to develop a profile of continuing education students -- what kinds of people are currently participating?

II. Program and course information (subject area, day of week, time, credit/noncredit, hours spent in study, transportation, access to class, place in daily routine). This information would be used to find out what students' needs are now being met and delineate participation in various programs.

III. Motivational information (reason for enrolling, degree expectations, job-related aspirations, fee paid and extent reimbursed, effect of fee on decision to enroll, why chose particular school, plans for next term). This information would be used to delineate motivations and reasons for students to enroll in continuing education.

IV. Reactions to possible changes in program offerings (more courses of one type or another, class scheduling, branch campuses, open university, family centers). This information would be used as a test of student demand for new programs or changes in delivery of courses.

The questionnaire was given to a random sample of 7% of the continuing education classes offered across the Commonwealth. Questionnaires were not administered to part-time students in regular full-time programs because there was no comparable method of reaching these students via the classroom. Other registration or mailing schemes were rejected as having low and biased response rates. Over 6,000 questionnaires were completed and returned.

Institutional Questionnaires to the Education Periphery

Questionnaires were sent to proprietary and independent institutions, adult education programs, and correspondence and home study programs. Proprietary and other independent institutions were identified from a National Center for Educational Statistics listing, the Yellow Pages of the phone book, and advertisements in newspapers. Adult education programs were included if they offered courses other than basic education, as identified by a listing of the Massachusetts Department of Education. Home study schools were those accredited by the National Home Study Council.

Data on courses and trends in enrollments were requested, as well as responses to questions about major topics addressed in Formats 1 and 2; characteristics of students, fees, cooperative programs, etc.

D. Definitions

Continuing Education (for Format 1): Courses, programs and students within the given institution which fall under the jurisdiction of the Division of Continuing Education or Extension or equivalent. In the public sector this means all courses, programs, and students not funded through the regular maintenance budget. In the private sector this usually means an evening division or college.

Part-time in Regular Full-time Programs (for Format 2): All part-time study options, students, and programs, etc. which are not under continuing education as defined above and which are funded through the regular institutional budget. In the public sector this means all programs, etc. funded through the regular maintenance budget.

Note: for Format 2, Part-time is defined as follows:

- Eight (8) or less credit hours for undergraduates in a 15-hour program
- Four (4) or less credit hours for graduates
- One or two courses in a four or five course program
- Summer session students who were not enrolled as full-time students during the preceding academic year

The reason for selecting this specific definition of part-time has to do with the overall objectives of this study. The "clientele" on which this study is focused is those students who do not themselves view study as their major occupation. The following groups should therefore be included:

a) people with full or part-time jobs who take courses on the side;

b) women who are primarily housewives who take courses on the side;

We do not want to include:

a) people who work part-time in addition to classwork which is their main goal, such as those students who must work;

b) people who might be taking a light load this particular semester but consider themselves primarily as students.

The Education Core: As originally defined, the scope of this study was to include the universe of institutions defined as "core" institutions. These were the postsecondary degree-granting two- and four-year institutions in the public system (Community Colleges, State Colleges, University of Massachusetts, Lowell Technological Institute, Southeastern Massachusetts) and the larger private institutions, generally those members of the Association of Independent Colleges and Universities of Massachusetts as well as selected others having significant continuing education programs.

The Education Periphery: All those institutions other than core institutions as defined above, engaged in some form of adult postsecondary education and having education as their primary function: other independent degree-granting or nondegree-granting proprietary institutions, adult education programs in the public school system, regional vocational/technical institutes, private adult evening centers, and home study or correspondence schools. Other forms of adult education such as church classes or YMCA classes were not included, since education was not their primary function.

E. Institutions Included in the Study

The universe of institutions approached in this study include all core and periphery institutions as defined above. All institutions were requested to supply information about programs and students; to insure completeness and accuracy of the data, several folloup efforts were made including telephone or on-site interviews in some cases. Those institutions which responded are included in the analysis. The list of these institutions is presented by geographic service area in the Appendix.

BEST COPY AVAILABLE

II. THE CONTINUING AND PART-TIME EDUCATION SYSTEM IN MASSACHUSETTS

A. Geographic Service Areas of Institutions. II-3

B. Trends in Enrollments and Current Enrollments II-133

C. Inventory of Continuing Education Programs and Part-time Study Opportunities in Regular Full-time Programs. II-239

D. Branch Campuses and Satellite Teaching Centers. II-333

E. Cooperation and Coordination. II-373

F. Transfer Policies II-389

G. Outreach, Admissions, Guidance. II-423

H. Financing, Pricing and Scholarships II-451

I. Administration and Management of Continuing and Part-time Postsecondary Education. II-477

J. Educational Technology. II-495

K. The Postsecondary Education Periphery II-523

L. Employer-Based Education Programs II-613

M. Nontraditional Study. II-629

N. Additional Information on Selected Aspects of Continuing Education. II-643

BEST COPY AVAILABLE

A. Geographic Service Areas of Institutions

DISCUSSION II-3
Continuing and Part-time Education Across the State II-4
Determination of Thirteen Geographic Service Areas of the Present System II-8
Analysis for the Thirteen Service Areas II-13

1. Table: Core and Periphery Institutions, With Enrollments, by Geographic Service Area II-15

2. Maps: Residences of Students Attending Each Institution (Density Maps). II-37
Springfield Geographic Service Area (Western Region). II-38
Pittsfield/North Adams Geographic Service Area (Western Region). II-48
Amherst/Northampton Geographic Service Area (Western Region). II-51
Worcester Geographic Service Area (Central Region). II-54
Fitchburg/Gardner Geographic Service Area (Central Region). II-68
Framingham Geographic Service Area (Central Region). II-71
Lynn/Salem Geographic Service Area (Northeast Region). II-74
Andover/Lowell Geographic Service Area (Northeast Region). II-78
Burlington/Bedford Geographic Service Area (Northeast Region). II-83
Brockton Geographic Service Area (Southeast Region). II-85
Fall River/New Bedford Geographic Service Area (Southeast Region). II-92
Falmouth/Barnstable Geographic Service Area (Southeast Region). II-96
Boston Geographic Service Area (Boston Region) II-100

BEST COPY AVAILABLE

DISCUSSION OF GEOGRAPHIC SERVICE AREAS OF INSTITUTIONS

Much of the analysis of this report is based on the existence of geographic service areas in continuing and part-time education. Institutions and students are divided into thirteen discrete and differentiable areas across the state as created by centers of population, roads, location of campuses, etc. Programs, trends in enrollments, clientele served and other issues are examined for each of these discrete areas rather than aggregated across the state as a whole. The determination of these thirteen areas is demonstrated in this Section.

Analysis within discrete geographic service areas is appropriate both from the client's point of view and from a program and planning perspective. The necessity of analyzing issues for each service area rather than for the state as a whole stems from the nature of part-time study and the diversity of services offered across the state.

First, program offerings and needs served should be looked at from a client's point of view: geographic proximity to a school or one of its branch campuses strongly determines rates of attendance in programs. Unlike full-time students who may go to school away from home, part-time and continuing education students must find programs within a reasonable distance from their home. They fit in a course or two a week amidst other major job or family commitments. The distances they are willing to drive or time they are willing to spend getting to and from class are limited. Of students currently enrolled in programs in Massachusetts, 75% to 80% live within twenty miles of the main or branch campus class they attend (see Section III.A.). When adults across the country were questioned about barriers they perceived to taking continuing education or other adult education, about 46% responded that finding the time amidst other responsibilities to commute to and attend classes was a major problem. (See Section IV.B.)

A major objective of this study is to examine services from the student-client's point of view. If the scope and distribution of services are to be examined in this manner, programs must be analyzed as they reach specific areas of population across the state.

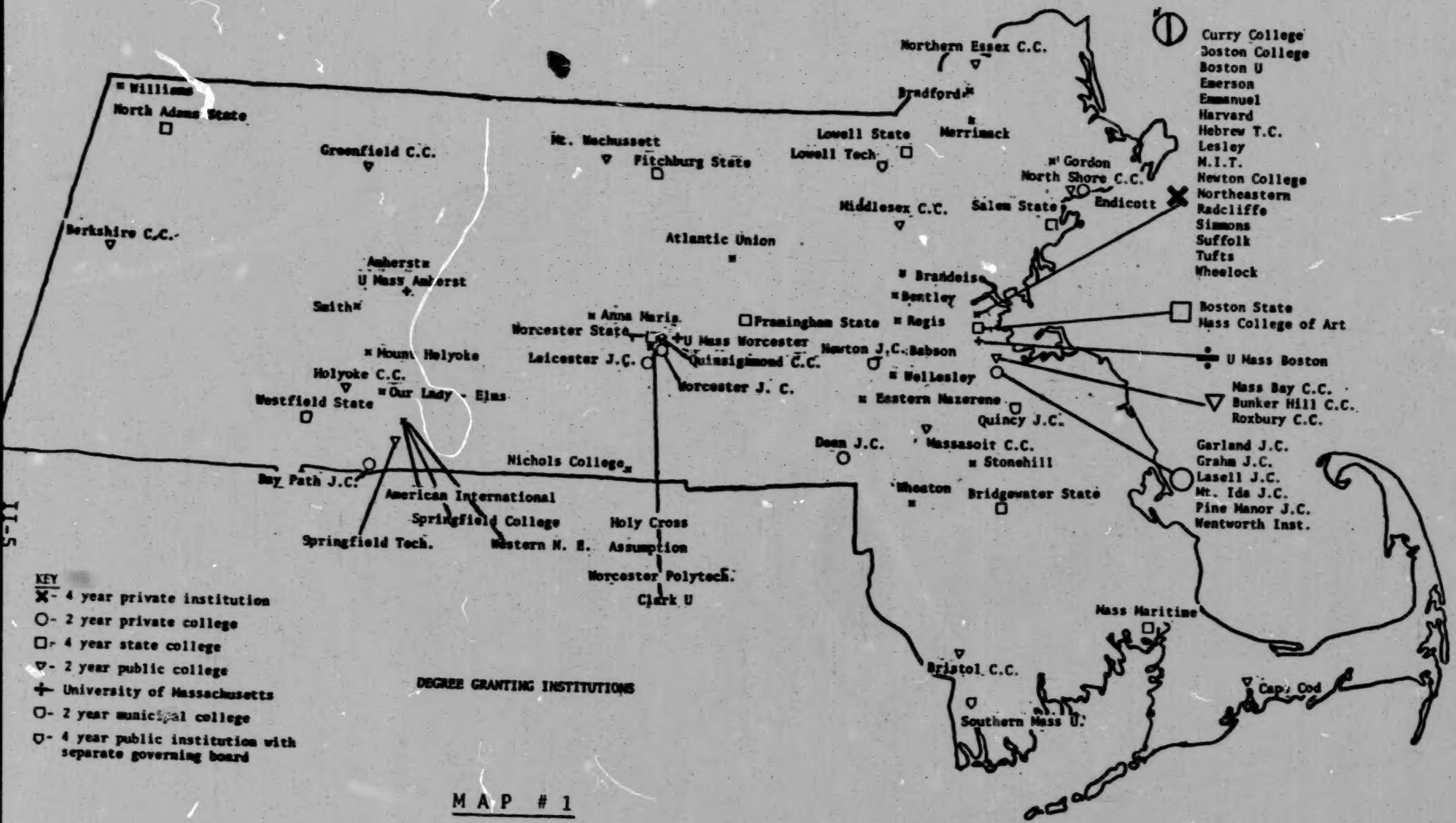
Secondly, from a program and planning perspective, analysis of issues by discrete geographic service areas is most appropriate. Strengths and weaknesses of program scope, comprehensiveness, competition and duplication are area specific and vary across the state. It is not a question of competition or coordination if a school in another geographic service area is offering the same degree or type of program, because the student clientele sources do not overlap. It would be a mistake to link analysis of the Boston area with its multiplicity of programs with analysis of other areas of the state having only a few and limited programs. The problems and solutions will vary significantly.

If analysis were made across the state as a whole, the Boston area with 50% of total enrollments would dominate the picture. Analysis by type of institution (e.g., state colleges or community colleges) would also be inappropriate from the student-client point of view, since the specific subject of interest and the proximity of where it is offered are more important to a client than the type of institution supplying it.

Continuing and Part-time Education across the State

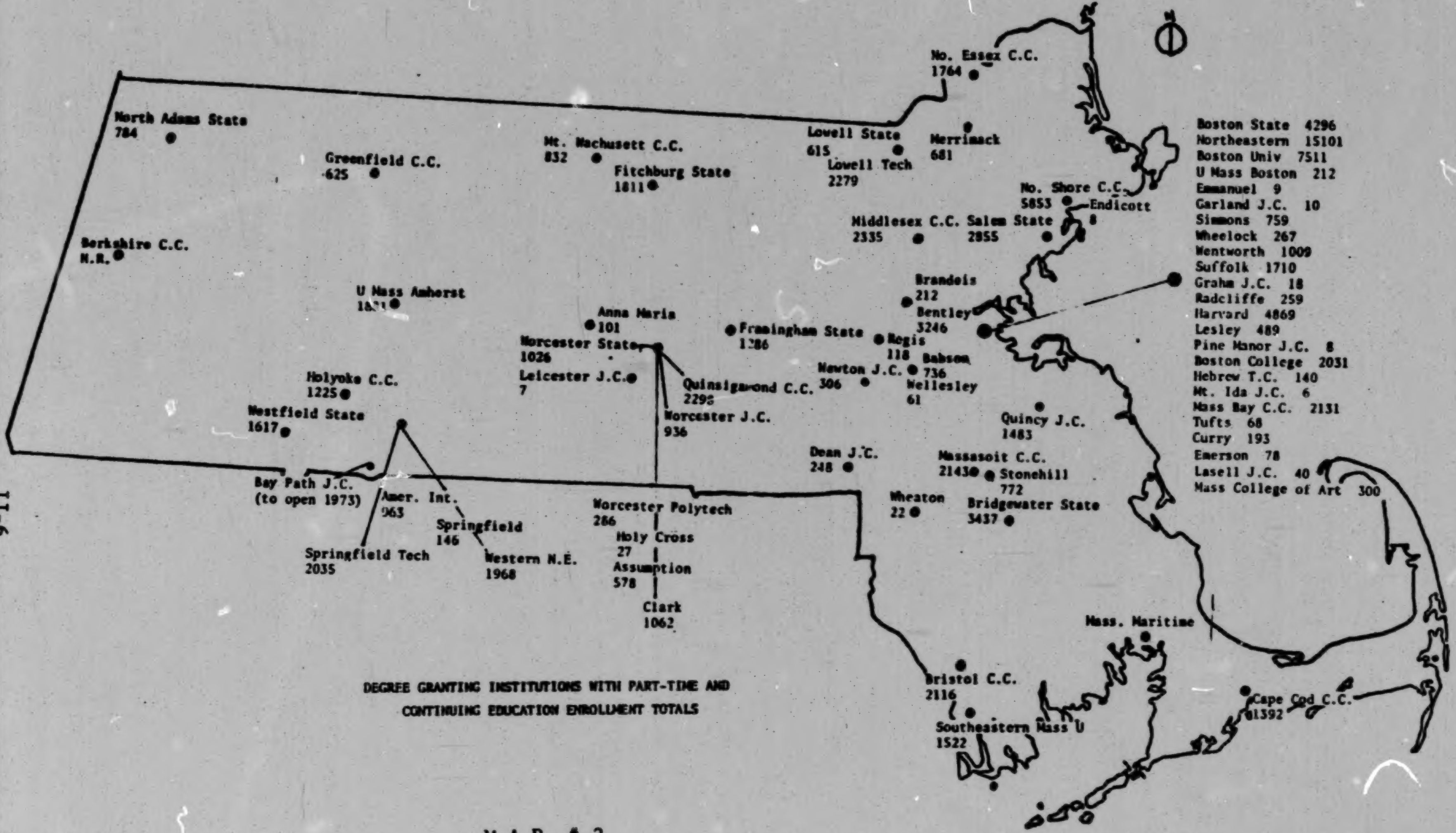
The distribution of continuing and part-time programs at degree-granting postsecondary institutions is shown in the following maps. The first map shows the degree-granting institutions in Massachusetts; the second map shows which have either continuing or part-time programs and the number of students enrolled in fall 1972. (The distribution of peripheral institutions is shown in Section II.K.) On the third map the centers of population and location of highways are delineated.

In comparing maps 1 and 2, two points become clear: first, the continuing and part-time programs are more heavily concentrated in the Boston area than are the institutions as a whole. Second, the public institutions provide most of the services, except in the metropolitan and suburban areas of Boston, Springfield and Worcester. Many private institutions in rural areas or small towns apparently do not perceive a strong role for themselves in continuing or part-time education. In these areas the development of programs has been from the opening of public campuses. In the large metropolitan areas, however, the private institutions have a strong tradition in serving adult needs for continuing education. It is in these metropolitan and suburban service areas that public/private competition is focussed.


Curry College
Boston College
Boston U
Emerson
Emmanuel
Harvard
Hebrew T.C.
Lesley
M.I.T.
Newton College
Northeastern
Radcliffe
Simmons
Suffolk
Tufts
Wheelock
Boston State
Mass College of Art
U Mass Boston
Mass Bay C.C.
Bunker Hill C.C.
Roxbury C.C.
Garland J.C.
Grahm J.C.
Lasell J.C.
Mt. Ida J.C.
Pine Manor J.C.
Wentworth Inst.
Northern Essex C.C.
Bradford
Merrimack
Lowell State
Lowell Tech
Gordon
North Shore C.C.
Endicott
Salem State
Middlesex C.C.
Brandeis
Bentley
Regis
Framingham State
Newton J.C.
Babson
Wellesley
Eastern Nazerene
Quincy J.C.
Massasoit C.C.
Stonehill
Dean J.C.
Wheaton
Bridgewater State
Mass Maritime
Bristol C.C.
Southern Mass U.
Cape Cod
Williams
North Adams State
Greenfield C.C.
Mt. Wachussett
Fitchburg State
Atlantic Union
Berkshire C.C.
Amherst
U Mass Amherst
Smith
Anna Maria
Worcester State
U Mass Worcester
Quinsigamond C.C.
Leicester J.C.
Worcester J. C.
Mount Holyoke
Holyoke C.C.
Our Lady - Elms
Westfield State
Nichols College
Bay Path J.C.
American International
Springfield College
Springfield Tech.
Western N. E.
Holy Cross
Assumption
Worcester Polytech.
Clark U
KEY
✕- 4 year private institution
○- 2 year private college
□- 4 year state college
▽- 2 year public college
+ University of Massachusetts
▢- 2 year municipal college
▽- 4 year public institution with separate governing board

DEGREE GRANTING INSTITUTIONS

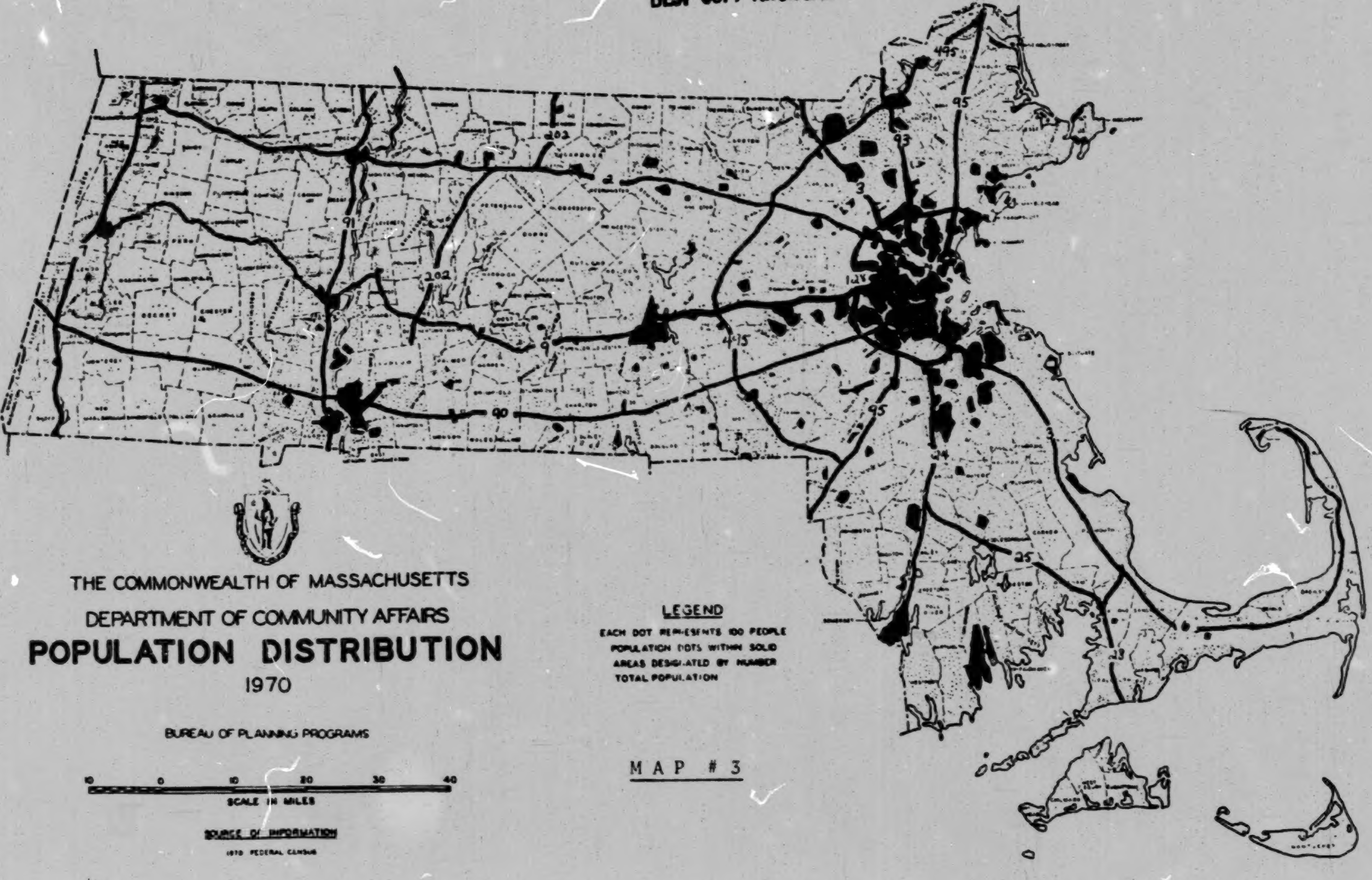
MAP # 1


No. Essex C.C.
1764
Lowell State
615
Merrimack
681
Lowell Tech
2279
North Adams State
784
Greenfield C.C.
625
Mt. Wachusett C.C.
832
Fitchburg State
1811
Berkshire C.C.
N.R.
U Mass Amherst
18[illegible]1
Anna Maria
101
Worcester State
1026
Leicester J.C.
7
Holyoke C.C.
1225
Westfield State
1617
Quinsigamond C.C.
2298
Worcester J.C.
936
Bay Path J.C.
(to open 1973)
Amer. Int.
963
Springfield
146
Springfield Tech
2035
Western N.E.
1968
Worcester Polytech
286
Holy Cross
27
Assumption
578
Clark
1062
No. Shore C.C.
5853
Endicott
8
Middlesex C.C.
2335
Salem State
2855
Brandeis
212
Bentley
3246
Framingham State
1386
Regis
118
Babson
736
Newton J.C.
306
Wellesley
61
Quincy J.C.
1483
Dean J.C.
248
Massasoit C.C.
2143
Stonehill
772
Wheaton
22
Bridgewater State
3437
Boston State 4296
Northeastern 15101
Boston Univ 7511
U Mass Boston 212
Emmanuel 9
Garland J.C. 10
Simmons 759
Wheelock 267
Wentworth 1009
Suffolk 1710
Graham J.C. 18
Radcliffe 259
Harvard 4869
Lesley 489
Pine Manor J.C. 8
Boston College 2031
Hebrew T.C. 140
Mt. Ida J.C. 6
Mass Bay C.C. 2131
Tufts 68
Curry 193
Emerson 78
Lasell J.C. 40
Mass College of Art 300
Mass. Maritime
Bristol C.C.
2116
Southeastern Mass U
1522
Cape Cod C.C.
1392

DEGREE GRANTING INSTITUTIONS WITH PART-TIME AND CONTINUING EDUCATION ENROLLMENT TOTALS

MAP # 2

BEST COPY AVAILABLE


495
95
93
3
2
202
91
202
9
128
495
95
90
24
3
25
6
10
0
10
20
30
40
SCALE IN MILES

THE COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF COMMUNITY AFFAIRS

POPULATION DISTRIBUTION
1970

BUREAU OF PLANNING PROGRAMS

SOURCE OF INFORMATION
1970 FEDERAL CENSUS

LEGEND
EACH DOT REPRESENTS 100 PEOPLE
POPULATION DOTS WITHIN SOLID
AREAS DESIGNATED BY NUMBER
TOTAL POPULATION

MAP # 3

The Determination of Thirteen Geographic Service Areas of the Present System

In order to accurately define currently existing service areas, each degree-granting institution with part-time or continuing education students was asked for a breakdown of town of residence of their students. These listings were used to construct "Residence of Students" maps for each program of continuing or part-time education. Towns from which large numbers of students came to attend classes were shaded in heavily on the maps, towns with few or no students left blank.

Analysis of these residence maps revealed that: first student attendance was determined by three main factors: proximity to the campus of concentrations of population, location of major highway systems, and location of branch campuses. Secondly, thirteen discrete service areas could be defined to represent areas of availability of programs from the point of view of the students and areas of program competition or overlap, etc.

Thirteen areas as delineated are, from west to east, Springfield area, Pittsfield/North Adams area, Amherst/Northampton area, Worcester area, Fitchburg/Gardner area, Framingham area, Lynn/Salem area, Andover/Lowell area, Burlington/ Bedford area, Brockton area, Fall River/ New Bedford area, Falmouth/Barnstable area, and the Boston area. The Schools providing services in each area are listed below.

GEOGRAPHIC SERVICE AREAS AND DEGREE-GRANTING INSTITUTIONS WITH CONTINUING AND PART-TIME EDUCATION PROGRAMS

SPRINGFIELD AREA

American International College
Bay Path Junior College
Holyoke Community College
Springfield College
Springfield Technical Community College
Western New England College
Westfield State College

PITTSFIELD/NORTH ADAMS AREA

Berkshire Community College
North Adams State College

AMHERST/NORTHAMPTON AREA

U./Mass.-Amherst
Greenfield Community College

WORCESTER AREA

Anna Maria College for Women
Assumption College
Clark University
College of the Holy Cross
Leicester Junior College
Quinsigamond Community College
Worcester Junior College
Worcester Polytechnic Institute
Worcester State College

FITCHBURG/GARDNER AREA

Fitchburg State College
Mt. Wachusett Community College

FRAMINGHAM AREA

Framingham State College
Northeastern Branch

LYNN/SALEM AREA

- Endicott Junior College
- North Shore Community College
- Northeastern - Lynn
- Salem State College

ANDOVER/LOWELL AREA

- Lowell State College
- Lowell Tech. Institute
- Merrimack College
- Northeastern - Haverhill
- Northern Essex Community College

BURLINGTON/BEDFORD AREA

- Middlesex Community College
- Northeastern - Burlington

BROCKTON AREA

- Bridgewater State College
- Dean Junior College
- Massasoit Community College
- Stonehill College
- Wheaton College

FALL RIVER/NEW BEDFORD AREA

- Bristol Community College
- Southeastern Mass. University

FALMOUTH/BARNSTABLE AREA

- Cape Cod Community College
- Mass. Maritime Academy

BOSTON AREA

- Babson College
- Bentley College
- Boston College
- Boston State College
- Boston University
- Brandeis University
- Curry College
- Emerson College
- Emmanuel College
- Garland Junior College
- Grahm Junior College
- Harvard University
- Hebrew Teachers College
- Lasell Junior College
- Lesley College
- Mass. Bay Community College
- Mass. College of Art
- Middlesex Community College - branch
- Mount Ida Junior College
- Newton Junior College
- Northeastern University
- Pine Manor Junior College
- Quincy Junior College
- Radcliffe College
- Regis College
- Simmons College
- Suffolk University
- Tufts University
- U./Mass.-Boston
- Wellesley College
- Wentworth Institute
- Wheelock College

The Andover/Lowell area with its four institutions, is shown here to demonstrate the delineation of the service areas. These four residence maps show clearly the major determinants of attendance in the programs. First, attendance is determined by concentration of population. In these cases both Lowell and Lawrence, cities of heaviest population density, are heavily represented in the attendance patterns. Second, highways play a role in cutting down the time/distance factor for towns along the highway. In these cases Route #495 running from northeast to southwest along the Merrimack River Valley facilitates attendance of students along its corridor. Finally, the attendance map for North Adams State College is included to demonstrate the effect of a branch campus program in Pittsfield on the concentration of students from that city.

BEST COPY AVAILABLE

RESIDENCE OF STUDENTS ATTENDING EVENING SCHOOL AND CONTINUING EDUCATION

LOWELL TECHNOLOGICAL INST.

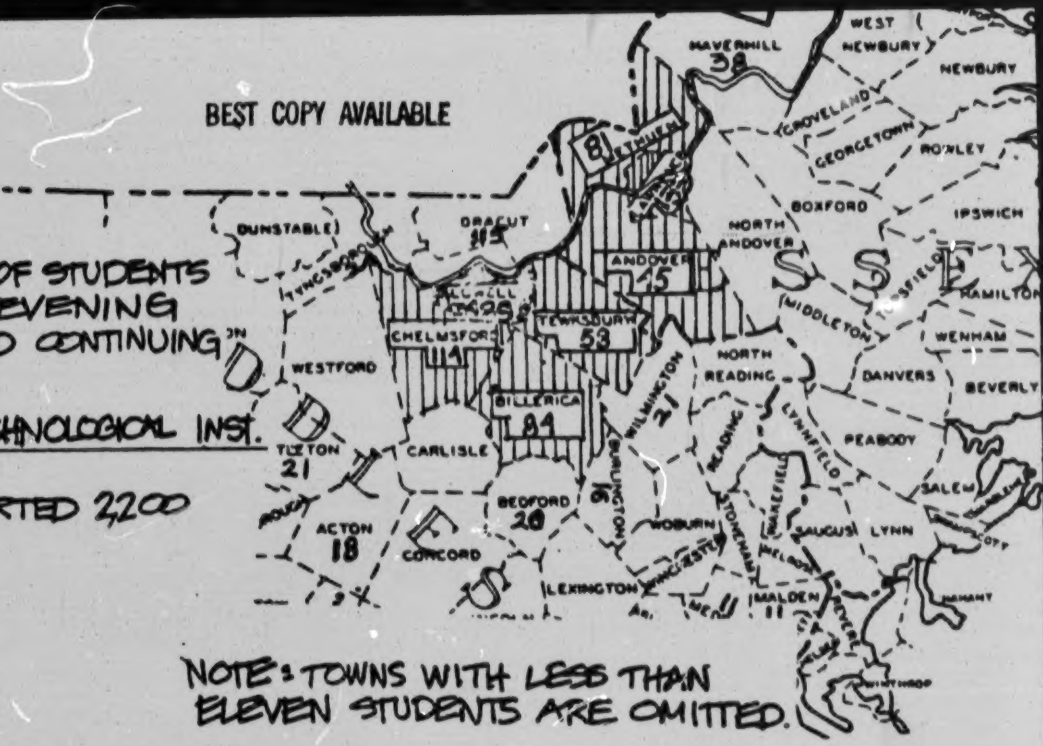
TOTAL REPORTED 2200

LEGEND

☐ 0-2%

▥ 2-8%

▦ ABOVE 8%


HAVERHILL
38
WEST NEWBURY
NEWBURY
GROVELAND
GEORGETOWN
ROWLEY
8
METHUEN
BOXFORD
IPSWICH
DUNSTABLE
DRACUT
115
NORTH ANDOVER
ANDOVER
145
ESSEX
TYNGSBOROUGH
LOWELL
HAMILTON
TOPSFIELD
MIDDLETON
CHELMSFORD
114
TEWKSBURY
53
WENHAM
WESTFORD
NORTH READING
DANVERS
BEVERLY
WILMINGTON
21
BILLERICA
84
PEABODY
LITTLETON
21
CARLISLE
READING
LYNNFIELD
BURLINGTON
16
SALEM
BEDFORD
26
WAKEFIELD
BOXBOROUGH
ACTON
18
WOBURN
SAUGUS
LYNN
CONCORD
STONEHAM
WINCHESTER
MELROSE
LEXINGTON
MALDEN
11
MEDFORD
11
NAHANT
REVERE
WINTHROP
MIDDLESEX

NOTE: TOWNS WITH LESS THAN ELEVEN STUDENTS ARE OMITTED.

RESIDENCE OF STUDENTS ATTENDING PART-TIME IN REGULAR COLLEGE PROGRAM

LOWELL STATE

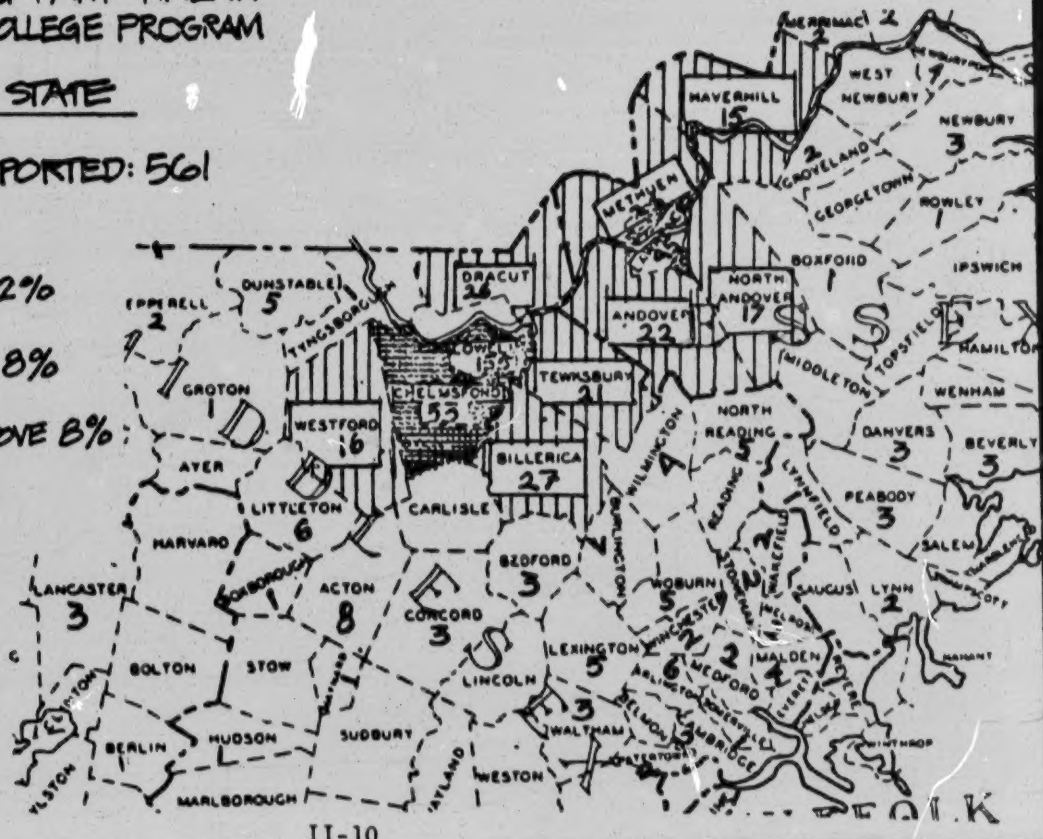
TOTAL REPORTED: 561

LEGEND

☐ 0-2%

▥ 2-8%

▦ ABOVE 8%


MERRIMAC 2
2
WEST NEWBURY
1
HAVERHILL
15
NEWBURY
3
2
GROVELAND
METHUEN
GEORGETOWN
ROWLEY
1
BOXFORD
1
IPSWICH
DUNSTABLE
5
DRACUT
26
PEPPERELL
2
NORTH ANDOVER
17
ANDOVER
22
ESSEX
TYNGSBOROUGH
LOWELL
HAMILTON
TOPSFIELD
MIDDLETON
GROTON
1
CHELMSFORD
53
TEWKSBURY
21
WENHAM
WESTFORD
16
NORTH READING
5
DANVERS
3
BEVERLY
3
WILMINGTON
BILLERICA
27
AYER
PEABODY
3
LITTLETON
6
CARLISLE
READING
LYNNFIELD
HARVARD
BURLINGTON
WAKEFIELD
SALEM
BEDFORD
3
LANCASTER
3
BOXBOROUGH
1
ACTON
8
WOBURN
5
SAUGUS
LYNN
2
CONCORD
3
STONEHAM
WINCHESTER
MELROSE
LEXINGTON
5
6
MEDFORD
2
MALDEN
4
NAHANT
BOLTON
STOW
LINCOLN
ARLINGTON
EVERETT
REVERE
CLINTON
3
WALTHAM
BELMONT
SOMERVILLE
3
CAMBRIDGE
BERLIN
HUDSON
SUDBURY
WATERTOWN
WINTHROP
WAYLAND
WESTON
BOYLSTON
MARLBOROUGH
MAYNARD
MIDDLESEX
SUFFOLK

BEST COPY AVAILABLE

RESIDENCE OF STUDENTS ATTENDING EVENING SCHOOL

NORTHERN ESSEX C. C.

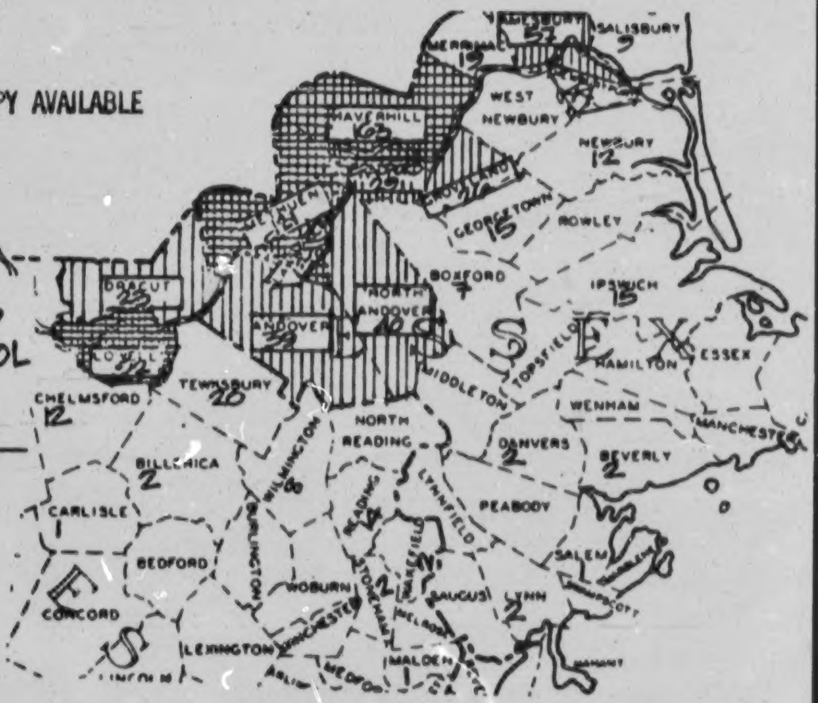
TOTAL REPORTED: 1026

LEGEND

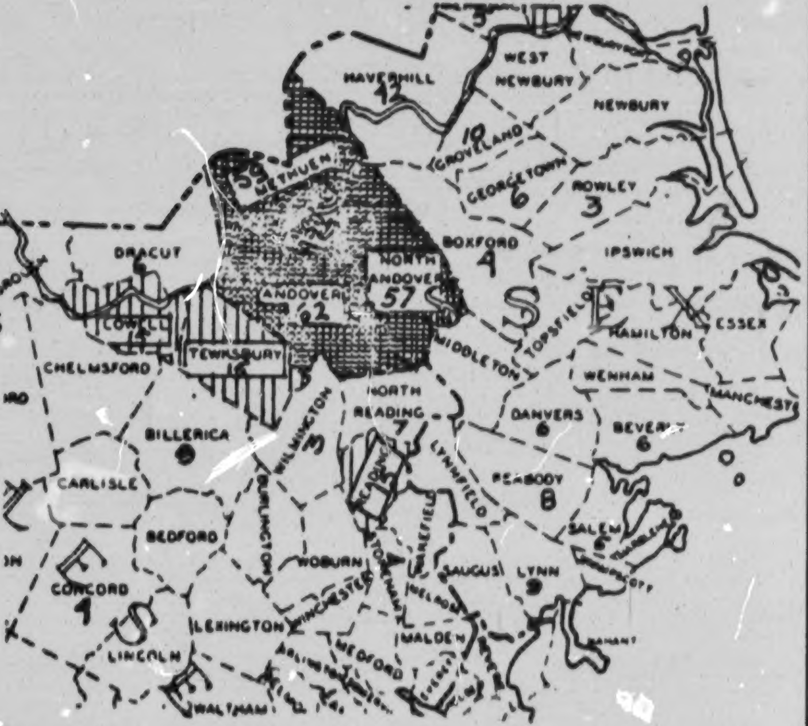
☐ 0-2%

▥ 2%-8%

▦ ABOVE 8%


AMESBURY 57
SALISBURY 9
MERRIMAC 19
WEST NEWBURY
HAVERHILL
NEWBURY 12
METHUEN
GROVELAND
GEORGETOWN 15
ROWLEY
BOXFORD 7
IPSWICH 15
DRACUT 25
NORTH ANDOVER 70
ANDOVER 39
LOWELL
ESSEX
TOPSFIELD
HAMILTON
TEWKSBURY 20
CHELMSFORD 12
MIDDLETON
WENHAM
MANCHESTER
NORTH READING
BILLERICA 2
WILMINGTON 6
DANVERS 2
BEVERLY 2
CARLISLE
PEABODY
READING
LYNNFIELD
BEDFORD
BURLINGTON
SALEM
WOBURN
SAUGUS
LYNN 2
CONCORD
WINCHESTER
LEXINGTON
MALDEN
MEDFORD
NAHANT

NOTE: TOWNS WITH LESS THAN 4 STUDENTS ARE OMITTED.


HAVERHILL 42
WEST NEWBURY
NEWBURY
GROVELAND 10
GEORGETOWN 6
ROWLEY 3
METHUEN 55
BOXFORD 4
IPSWICH
TOWNSEND
PEPPERELL
DUNSTABLE
DRACUT
NORTH ANDOVER 57
ANDOVER 62
ESSEX
TOPSFIELD
HAMILTON
LOWELL
TEWKSBURY 16
CHELMSFORD
MIDDLETON
WENHAM
MANCHESTER
NORTH READING 7
DANVERS 6
BEVERLY 6
BILLERICA 9
WILMINGTON 3
CARLISLE
PEABODY 8
READING
LYNNFIELD
BEDFORD
BURLINGTON
SALEM 6
WOBURN
SAUGUS
LYNN 9
CONCORD 4
WINCHESTER
LEXINGTON
LINCOLN
MALDEN
MEDFORD
WALTHAM
NAHANT

RESIDENCE OF STUDENTS ATTENDING EVENING SESSION

MERRIMACK COLLEGE

TOTAL REPORTED: 562

LEGEND

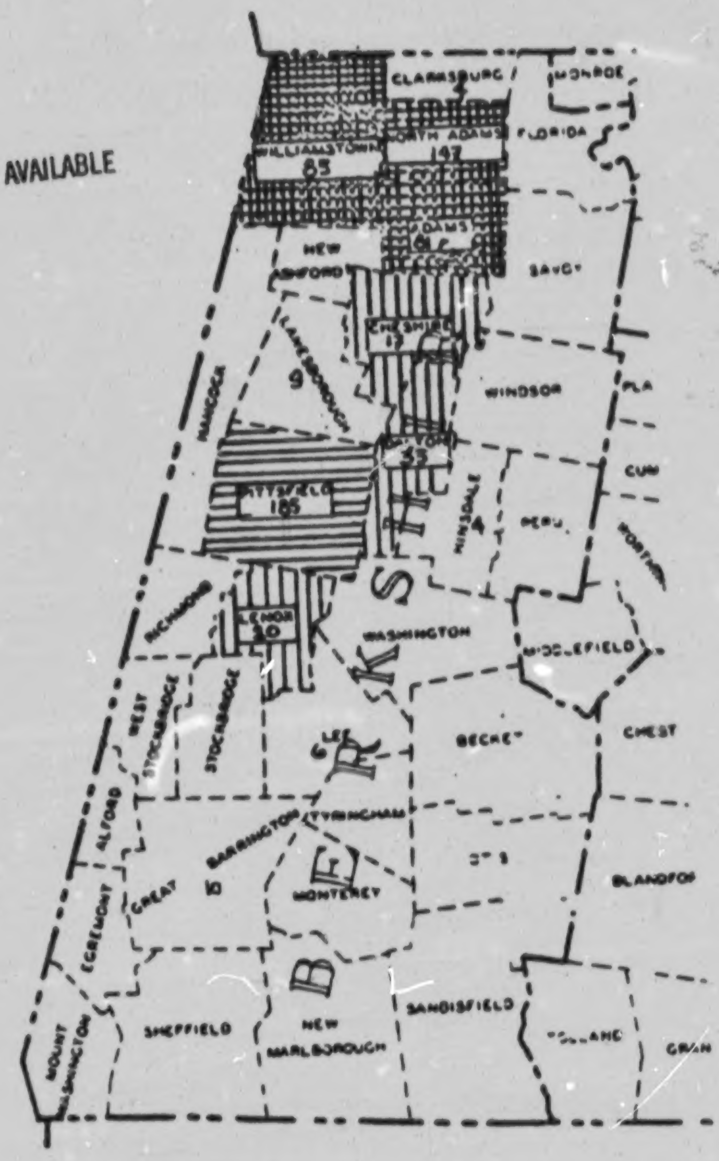
☐ 0-2%

▥ 2-8%

▦ ABOVE 8%

NOTE: TOWNS WITH LESS THAN THREE STUDENTS ARE OMITTED.

BEST COPY AVAILABLE


CLARKSBURG
MONROE
WILLIAMSTOWN
85
NORTH ADAMS
147
FLORIDA
ADAMS
61
NEW ASHFORD
SAVOY
CHESHIRE
17
LANESBOROUGH
9
HANCOCK
WINDSOR
PLA
DALTON
33
CUM
PITTSFIELD
185
HINSDALE
4
PERU
WORTHINGTON
RICHMOND
LENOX
30
WASHINGTON
MIDDLEFIELD
WEST STOCKBRIDGE
STOCKBRIDGE
LEE
6
BECKET
CHEST
ALFORD
GREAT BARRINGTON
15
TYRINGHAM
OTIS
BLANDFORD
MONTEREY
EGREMONT
MOUNT WASHINGTON
SHEFFIELD
NEW MARLBOROUGH
SANDISFIELD
TOLLAND
GRAN
BERKSHIRE

LEGEND

☐ 0-2%

▥ 2-8%

▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING CONTINUING EDUCATION.

NORTH ADAMS STATE COLLEGE

TOTAL REPORTED: 758

NOTE: TOWNS WITH LESS THAN FOUR STUDENTS ARE OMITTED.

BEST COPY AVAILABLE

Other examples of the effects of highways are: in the Connecticut River Valley between Springfield and Amherst where the student residence concentration and population appear to follow the route of Interstate 91. Other patterns can be seen along Route #7 in the Pittsfield/North Adams area.

Branch campuses play a role in other areas of the state: the high concentrations of students in Northeastern's program from Weymouth, Framingham, and Lynn, for example, may be explained by the presence of branch campuses in those towns. A high attendance rate of students in the Chicopee area can be understood by the fact that many institutions have satellite programs at Westover Air Force Base.

In the majority of cases the geographic service areas do not overlap. The concentration of residences tapers off sharply as distance from the campus increases, and most of the students in an area are served by the institutions in that area. Exceptions are related to the presence of branch campuses of institutions from other service areas located within the range of another service area. One service area exception is Dean Junior College which pulls students from its own area around Franklin and does not clearly fit into any one of the thirteen service areas.

Analysis for Thirteen Service Areas

These thirteen service areas as defined from attendance maps are studied in depth with respect to the key issues to be addressed in the report. In following sections, analysis is made of trends in enrollments, program scope and comprehensiveness, outreach, admissions, and guidance, and clientele demand for programs. Certain issues are examined on a statewide basis -- administration and finance, educational technology use, transfer policies, relationship to the periphery, and others. These cases are ones where differences are greater among types of institutions than among service areas or where the results of the analysis do not vary across the state.

In some cases the thirteen service areas were further aggregated into five "regions" according to the suggested regional plan under proposed Educational Reorganization and the general movement to uniform substate planning regions encouraged by the federal government. Analysis according to these five regions was necessary or desirable in cases where comparative information was available broken down by the five regions. Peripheral institutions fall less clearly into the thirteen service areas as defined by the currently functioning degree-granting programs. However, their services have also been incorporated into the analysis on a service area bases.

II.A.1. Table: Core and Periphery Institutions, with Enrollments, by Geographic Service Area

KEY TO THE FOLLOWING TABLES

Qualification: Included in these lists are the core and periphery instructions which supplied us with information. Every effort was made to achieve comprehensiveness. For reasons explained in the Introduction, the data on the Core is generally complete, while that on the Periphery has some gaps.

Footnotes

① Approximate total

② No distinction between basic-secondary and postsecondary

③ 1970 Total

④ Future: two-year degree in business administration

⑤ 1972-73 total; in addition, approximately 2000 people in the four community schools adult programs

⑥ Average enrollment; no distinction between basic-secondary and postsecondary

⑦ Figure for 1971-72

⑧ For year

⑨ No distinction between continuing education and part-time

⑩ Graduate students only

⑪ Amended total, corrected for inconsistencies in data

Type of Institution

S-1 = public, two-year
S-2 = public, four-year
P-1 = private, two-year
P-2 = private, four-year
PR = proprietary
P/I = proprietary/independent
BC = branch campus
STC = satellite teaching center
AE = adult education program
( ) = indicates BC or STC of an institution from a different area

See Qualification

BEST COPY AVAILABLE

	Type	Fall 1972 Headcount of Postsecondary Students			Fall 1972 Postsecondary Course Registration			Degree	For All B.C. and S.T.C.			Area:
		Matric.	NonMatric	Total	Credit	Noncredit	Total		Year Started	# Enrolled	Institution	Springfi
Holyoke C.C. CE	S-1	837	286	1123	1613	123	1736					
PT		102	---	102	146	---	146					
Springfield Tech C.C.												
CE	S-1	NR	NR	2002	NR	NR	3414					
PT		14	19	33	61	---	61					
American International												
College CE und	P-2	398	---	398	734	---	734					
CE grad		495	---	495	780	---	780					
PT und		70	---	70	120	---	120					
Western N.E. College												
CE und	P-2	815	77	892	1766	---	1766					
CE grad		1050	4	1054	2798	---	2798					
PT und		20	2	22	41	---	41					
Springfield Coll. CE	P-2	NR	NR	146	252	---	252					
Westfield State Coll.												
CE und	S-2	199	257	456	2203	41	2244					
CE grad		373	816	1161(1)								
Westover AFB	BC							BA	1961	294	American Int.	
Westover AFB	BC							MBA	1967	75(1)	Western N.E.	
Westover AFB	BC								1972	42	Westfield Sta	
Springfield Hospital	BC								1971	90	Springfield T	
Westover AFB	BC							AS	1971	27	Springfield T	
Westover AFB	BC								1971	32	Holyoke C.C.	
Holyoke	STC								1971	4	Westfield Sta	
Holyoke Model Cities	STC							M.Ed.	1972	48	Westfield Sta	
Springfield	STC								1972	24	Westfield Sta	
Wistariahurst Museum	STC								1972	50	Holyoke C.C.	
(Springfield Tech HS)	STC								1968		Fitchburg Sta	
Sheffield	STC								1972	24	Westfield Sta	
Palmer H.S.	STC								1971		Springfield T	
Acme Chain Co.	STC								1972		Holyoke C.C.	
Southwick H.S.	AE			140(1)			140(1)					
South Hadley H.S.	AE			700			40					
Springfield Public Scls	AE			NR			NR					
Easthampton	AE			271(2)			271(2)					
Sub-Total		4373	1461	9065								
		Cont. Ed.	Part-time	Total								
Brom Barber School	PR	NR	15	15								
United Technical School	PR	64	--	64								
Vocation Education and Training Corp.	P/I	26	15	41								

See Qualification

A[illegible]

Springfiel

page 2

	Type	Fall 1972 Headcount of Postsecondary Students			Fall 1972 Postsecondary Course Registration			Degree	For All B.C. and S.T.C.		
		Matric.	Nonmatric.	Total	Credit	Noncredit	Total		Year Started	# Enrolled	Institution
		C.E.	P.T.								
Springfield Hosp. Med. Center	P/I	---	---	NR							
St. Hyacinth College And Seminary	P/I	---	---	NR							
Kay-Harney Hair Design Academy	P/I	---	---	NR							
Barnes Aviation	P/I	---	9	9							
TOTALS				9194	10614	164	11473			1150	

See Qualification

Area:
Pittsfiel
No. Adams

		Fall 1972 Headcount of Postsecondary Students			Fall 1972 Postsecondary Course Registration				For All B.C. and S.T.C.		
	Type	Matric.	NonMatric.	Total	Credit	Noncredit	Total	**Degree**	Year Started	# Enrolled	Institution
Berkshire C.C. CE	S-1			NR			NR				
No. Adams State Coll.											
CE und	S-2	111	165	276	517	---	517				
PT und		22	18	40	43	---	43				
CE grad		157	311	468	621	---	621				
(Adams Junior High)	STC								1968		Fitchburg
St. Luke's School of Nursing	STC									47	No. Adams
(Berkshire C.C.)	STC							AS	1972	23	Holyoke C.C.
Berkshire Country Day School	BC										No. Adams
Monument Mt. Regional High School	AE			700			900				
Lee High School	AE			132			132				
Lenox Public Schools	AE			NR			NR				
Wahconah Regional	AE			253			16				
Sub-Total		290	494	1869							
		Cont. Ed.	Part-time	Total							
Berkshire Christian College	P/I	---	10	10							
Simon's Rock	P/I	---	32	32							
Berkshire Aviation	P/I	---	---	NR							
TOTALS				1911	1181	---	2229			70	

See Qualification

Area: Amherst/ Northampton

	Type	Fall 1972 Headcount of Postsecondary Students: Matric.	Nonmatric.	Total	Fall 1972 Postsecondary Course Registration: Credit	Noncredit	Total	Degree	For All B.C. and S.T.C.: Year Started	# Enrolled	Institution
U. Mass/Amherst CE und	P-2	NR	NR	1533	NR	NR	2242				
PT und		37	252	289	---	---	NR				
CE grad		46	13	59	NR	NR	564				
Greenfield C.C. CE		35	417	432	624	590	1214				
Greenfield	STC										U. Mass./Amherst
Amherst High School	STC									10	U. Mass./Amherst
(Greenfield)	STC								1972	20	Westfield State
(Turners Falls Schools)	STC								1972	40	Westfield State
Greenfield Public Schools	AE			257			NR				
Amherst Pelham Regional School District	AE			1903			2283				
Sub-Total		118	682	4493							
		Cont. Ed.	Part-time	Total							
Northampton Jr. Coll.	P/I	20	13	33							
City Aviation	P/I	---	58	58							
TOTALS				4584	624	590	6303			70	

See Qualification

Area: Worcester

		Fall 1972 Headcount of Postsecondary Students			Fall 1972 Postsecondary Course Registration				For All B.C. and S.T.C.		
	Type	Matric.	Nonmatric.	Total	Credit	Noncredit	Total	Degree	Year Started	# Enrolled	Institution
Quinsigamond C.C. CE	S-1	589	1692	2281	3524	7	3531				
PT		15	2	17	26	---	26				
Assumption Coll. CE und	P-2	51	7	58	99	---	99				
PT und		56	16	74	---	---	NR				
PT grad		230	216	446	---	---	NR				
Clark University CE und	P-2	446	238	715	1237	---	1237				
PT und		---	149	149	---	---	NR				
PT grad		---	198	198	---	---	NR				
Worcester State Coll. CE und	S-2	1	72	73	150	---	150				
PT und		---	36	36	---	65	65				
CE grad		213	699	917	1126	38	1164				
PT grad		---	---	NR	---	---	NR				
College of the Holy Cross PT	P-2	---	---	NR	---	---	NR				
Worcester Polytechnic Institute CE	P-2	256	---	256	NR	NR	365				
PT		20	10	30	35	---	35				
Leicester Jr. Coll. PT	P-1	49	---	49	55	---	55				
Anna Maria Coll. CE	P-2	52	---	52	108	---	108				
PT		49	---	49	55	---	55				
(Career Opportunity Program)	STC							BA	1971	59	U.Mass/Amherst
(Worcester Voc.)	STC							BS	1932	668	Fitchburg State
Southbridge	BC								1969	100	Quinsigamond C.C
Blackstone	BC								1971	100	Quinsigamond C.C
State Mutual Life Ins.	STC							④	1972	45	Quinsigamond C.C
Worcester Police Dept.	STC								1972	400	Quinsigamond C.C
(Auburn High School)	STC								1968		Fitchburg State
Various Mfg. Plants	STC								1969	110	Quinsigamond C.C
Fed. Funded Agencies	STC								1968	18①	Quinsigamond C.C
Eagle Hill School	STC									15	Assumption Col.
Bartlett High School	AE			247			14				
Northbridge Jr.-Sr. HS	AE			232(2)			NR				
Sutton Jr.-Sr. H.S.	AE			40(2)			40(2)				
Tahanto Regional H.S.	AE			NR			NR				
Worcester Public Schls	AE			1162(5)			NR				
Sub-Total		2032	335	7081							

See Qualification

Area:

Worceste

page 2

	Type	Fall 1972 Headcount of Postsecondary Students			Fall 1972 Postsecondary Course Registration			Degree	For All B.C. and S.T.C.		
		Matric.	Nonmatric.	Total	Credit	Noncredit	Total		Year Started	# Enrolled	Institution
		Cont. Ed.	Part-time	Total							
School, Worcester Art Museum	P/I	---	685	685③							
Leo's Beauty Institute	PR	---	6	6							
Broms Academy of Hairdressing	P/I	---	25	25							
Becker Jr. College	P-1	---	15	15							
Vitek Inc. (Air Worcester)	P/I	---	60	60							
Electronic Computer Programming	P/I	15	---	15							
Hiller Airport Flying Service	P/I	---	50	50							
N.E. School of Acctng	P/I	18	---	18							
Saltar Secretarial School	P/I	75	13	88							
Hopedale Airways, Inc.	P/I	---	50	50							
Sterling Aviation	P/I	---	20	20							
TOTALS				8113	6415	110	6944			1515	

See Qualification

		Fall 1972 Headcount of Postsecondary Students			Fall 1972 Postsecondary Course Registration				For All B.C. and S.T.C.			Are
	Type	Matric.	NonMatric.	Total	Credit	Noncredit	Total	Degree	Year Started	# Enrolled	Institution	Fitch Gardn
Mt. Wachusett C.C. CE	S-1	264	531	795	1311	16	1327					
PT		14	23	37	52	---	52					
Fitchburg State CE und	S-2	663	130	793	1156	49	1205					
CE grad		597	421	1018	1443	1	1444					
(Union Twist Drill)	STC									15	Greenfield C	
Fort Devens	BC								1966	274	Mt. Wachuset	
Athol High School	STC								1971	68	Mt. Wachuset	
(Ayer)	STC								1963	40	Northeastern	
Fitchburg Planetarium	STC								1968		Fitchburg St	
Joint with Merrimack Ed. Centers	STC								1971	166	Fitchburg St	
Nashoba Regional H.S.	STC								1972	147	Mt. Wachuset	
Leominster Public Scls	AE			542			18					
Lunenberg Public Scls	AE			NR			200 ⑥					
Sub-Total		1538	1105	3185								
		Cont. Ed.	Part-time	Total								
Hunter Aviation Corp.	P/I	---	12	12								
Regina Coeli College	P/I	---	3	3								
Henri's School of Hair Design	P/I	---	---	NR								
TOTALS				3200	3962	66	4246			710		

See Qualification

	Type	Fall 1972 Headcount of Students			Fall 1972 Course Registration			Degree	For All B.C. and S.T.C.			Area: Framingham
		Matric.		Total	Credit		Total		Year Started	# Enrolled	Institution	
ramingham State CEund	S-2	987	---	987	1357	15	1372					
CE grad		185	355	1040	1310	3	1313					
rtheastern-Framingham	BC							MBA	1965	1982	Northeastern	
oncord-Carlisle HS)	BC							BA/MA	1972	98	U.Mass./Amherst	
ramingham Civic Lge.	BC								1972	120	Framingham State	
arist Campus	STC								1972	varied	Framingham Stat	
American Optical)	STC										Worcester Poly.	
igital Equipment Co.)	STC										Worcester Poly.	
ramingham High School	STC								1968		Fitchburg State	
Ashland)	BC								1968		Northeastern	
ilford Schools	AE			22 ①			22 ①					
opkinton Schools	AE			100			100					
atick High School	AE			820			820					
incoln-Sudbury H.S.	AE			768			NR					
oncord-Carlisle Reg. School District	AE			NR			2158					
aynard School Dept.	AE			210 ②			266 ②					
olliston Public Scls	AE			220 ①			NR					
Sub-Total		1172	355	4167								
		Cont. Ed.	Part-time	Total								
Optician's School of Framingham	P/I	---	12	12								
Don's Flying Service	P/I	---	75	75								
Kenneth Hair Desig	P/I	29	15	44								
TOTALS				4298	2667	18	6051			2200		

See Qualification

	Type	Fall 1972 Headcount of Postsecondary Students			Fall 1972 Postsecondary Course Registration			Degree	For All B.C. and S.T.C.			Are
		Matric.	NonMatric.	Total	Credit	Noncredit	Total		Year Started	# Enrolled	Institution	Lynn/ Sale
North Shore C.C. CE	S-1	NR	NR	5853	NR	NR	8015					
Endicott Jr. Col. PT	P-1	8	--	8	11	--	11					
Salem State CE d	S-2	344	1084	1428								
CE grad		512	915	1427	2246	11	2257					
Northeastern-Lynn	BC								1965	767	Northeaster	
Lynn	BC								1972	600	No Shore C.	
Gloucester	BC								1969	175	No Shore C.	
Danvers	BC								1971	200	No Shore C.	
Lynn Evening School	AE			1302			1735					
Danvers	AE			440②			1					
Swampscott Public Scls	AE			NR			730②					
Stoneham Public Scls	AE			NR			656					
Sub-Total		864	1999	10458								
		Cont. Ed.	Part-time	Total								
Gordon-Cornwell Theol. Seminary	P/I	50②	29②	79②								
Marian Ct. Secretarial School	P/I	---	32	32								
Continental Beauty Academy	P/I	12	---	12								
East Coast Tractor Trailer School	P/I	---	6	6								
Mansfield Beauty Acad.	P/I	---	---	NR								
N.E. Flyers Air Serv.	P/I	---	25	25								
No. Atlantic Airways	P/I	---	200	200								
TAD Institute	P/I	---	---	NR								
TOTALS				10812	2246	11	13405			1742		

BEST COPY AVAILABLE

See Qualification

		Fall 1972 Headcount of Postsecondary Students			Fall 1972 Postsecondary Course Registration				For All B.C. and S.T.C.			Area: Andover/ Lowell
	Type	Matric.	NonMatric.	Total	Credit	Noncredit	Total	Degree	Year Started	# Enrolled	Institution	
orthern Essex C.C. CE	S-1	NR	NR	1764	NR	NR	1986					
errimack Coll. CE	P-2	NR	NR	681	1160	---	1160					
owell Tech. CE	S-2	1720	559	2279	NR	NR	4758					
owell State PT	S-2	212	403	615	916	---	916					
ortheastern-Haverhill	BC							MBA	1965	476	Northeastern	
Andover Voc.)	STC							BS	1932		Fitchburg State	
nders Associates)	STC										Worcester Poly	
(Lowell H.S.)	STC								1968		Fitchburg State	
(Lowell:Headstart)	STC								1970	25	Middlesex C.C.	
(Lowell:New Careers)	STC								1970	75	Middlesex C.C.	
(Lowell:Model Cities)	STC								1970	25	Middlesex C.C.	
Western Electric	STC									59	Lowell Tech.	
(Nashua, N.H.)	BC							MBA		78	Northeastern	
Chelmsford H.S.	AE			NR			NR					
Tewksbury Scl. System	AE			30			NR					
Tyngsboro Public Scls	AE			150 ②			175 ②					
No. Middle Scl. and Westford Academy	AE			153 ②			153 ②					
City of Lawrence	AE			258 ②			NR					
Masconomet Reg. H.S.	AE			224			224					
Sub-Totals		1932	962	6154								
		Cont. Ed.	Part-time	Total								
owell Academy	PR	22	6	28								
. Fazio Inst. of Beauty Culture	PR	--	--	NR								
olari School of Hair Design	P/I	18	9	27								
ndover Inst. of Bus.	P/I	--	--	NR								
.B. Airways, Inc.	P/I	--	17	17								
utton Flying Service	P/I	--	28	28								
ew Mac Aviation	P/I	--	100	100								
TOTALS				6354	2076	--	9372			738		

See Qualification

	Type	Fall 1972 Headcount of Postsecondary Students			Fall 1972 Postsecondary Course Registration			Degree	For All B.C. and S.T.C.			Are
		Matric.	NonMatric.	Total	Credit	Noncredit	Total		Year Started	# Enrolled	Institution	Burli Bedfo
Middlesex C.C. CE	S-1	NR	NR	2335	2293	172	2465					
Northeastern-Burlington	BC							MBA	1964	9600	Northeaster	
(Reading H.S.)	STC								1968		Fitchburg S	
Bedford-Marist Ext. Center	BC								1972	100	Middlesex C	
Woburn	BC								1971	60	Middlesex C	
Hanscom Field	BC								1971	60	Middlesex C	
Wilmington H.S.	AE			284			15					
Sub-Total		--	—	2487								
		Cont. Ed.	Part-time	Total								
Honeywell Institute of Info. Science	PR	43	—	43								
Control Data Inst.	PR	89	—	89								
Executive Flyers Aviation Corp.	P/I	--	180	180								
Hatheway School of Conservation Ed.	P/I	--	--	NR								
Technical Aero Service	P/I	--	175①	175①								
Comerford Flight Scl.	PR	--	250	250								
TOTALS				3224	2293	173	2480			9820		

See Qualification

Area: Brockton

	Type	Fall 1972 Headcount of Postsecondary Students			Fall 1972 Postsecondary Course Registration			Degree	For All B.C. and S.T.C.		
		Matric.	NonMatric.	Total	Credit	Noncredit	Total		Year Started	# Enrolled	Institution
Massasoit C.C. CE	S-1	NR	NR	2143	2460	561	3021				
Stonehill CE	P-2	185	587	772	744	415	1159				
Wheaton PT	P-2	--	22	22	28	--	28				
Bridgewater State											
CE und	S-2	235	1044	1279	2046	--	2046				
PT und				NR			NR				
CE grad		632	1526	2158	3109	--	3109				
PT grad				NR			NR				
Dean Jr. Coll. CE	P-1	39	198	237	243	65	308				
PT		2	7	9	15	--	15				
(Canton Voc.)	STC							B.S.	1932		Fitchburg Stat
(Brockton H.S.)	STC								1968		Fitchburg Stat
Plymouth and Bridgewater/Mass. Correctional Institutions	STC								1972	88①	Massasoit C.C.
Brockton	STC								1972	100	Massasoit C.C.
W. Bridgewater	BC								1970	650f	Massasoit C.C.
Mirmar-Duxbury	BC								1966	850	Massasoit C.C.
(King Phillip Reg HS)	STC								1971	50[I]	Bristol C.C.
(Norfolk State Prison)	STC								1971	55[II]	Bristol C.C.
(Marshfield)	STC								1971	100	Northeastern
(Bridgewater)	STC								1967	46	Northeastern
(Blue Hills H.S.)	STC								1972	70	Boston State
(Stoughton H.S.)	STC								1968		Fitchburg Stat
Foxborough	AE			NR			NR				
E. Bridgewater H.S.	AE			140			7				
Canton Public Schools	AE			397			26				
Weymouth Evening Scl	AE			1202			1222				
Braintree School Dept.	AE			NR			1500				
Scituate H.S.	AE			1800①			1800②				
Hingham Public Schools	AE			497			630				
Norwell Public Schools	AE			200			200				
Hanover Evening School	AE			NR			NR				
Sub-Total		1093	3384	10856							
		Cont. Ed.	Part-time	Total							
Brockton Academy of Beauty Culture	PR	18	20	38							
Old Colony Trade Scl	PR	40	—	40							
Chandler Scl of Welding	PR	24	--	24							

See Qualification

Area: Brockton

Page

		Fall 1972 Headcount of Postsecondary Students			Fall 1972 Postsecondary Course Registration				For All B.C. and S.T.C.		
	Type	Matric.	NonMatric.	Total	Credit	Noncredit	Total	Degree	Year Started	# Enrolled	Institution
		Cont. Ed.	Part-time	Total							
King Aviation Service	P/I			NR							
Hall Institute of Real Estate	P/I	30	--	30							
Marshfield Aviation	P/I	--	75	75							
TOTALS				11063	8645	1041	15071			2009	

See Qualification

	Type	Fall 1972 Headcount of Postsecondary Students			Fall 1972 Postsecondary Course Registration			Degree	For All B.C. and S.T.C.			Area: Fall River New Bedfor
		Matric.	NonMatric.	Total	Credit	Noncredit	Total		Year Started	# Enrolled	Institution	
ristol C.C. CE	S-1	NR	NR	2100	2291	634	2925					
PT		NR	NR	16	24	--	24					
outheastern Mass.Univ												
CE und	S-2	NR	NR	1256	1786	13	1799					
PT und		--	116	116	174	--	174					
CE grad		NR	NR	140	205	--	205					
PT grad		10	--	10	10	--	10					
all River Voc.)	STC							BS	1932		Fitchburg State	
ttleboro H.S.	STC								1968	99(82)	Bristol C.C.	
ew Bedford H.S.	STC								1970	97(82)	Bristol C.C.	
aunton Regional Voc.	STC								1972	92(87)	Bristol C.C.	
New London, Conn., nd Newport, R.I.)	BC									519	Harvard	
Mattapoisett)	STC								1968		Fitchburg State	
Providence, R.I.)	STC									24	Harvard	
Rochester H.S.)	STC								1968		Fitchburg State	
pponequet Public Scls	AE			145②			160②					
cushnet Public Scls	AE			25			25					
Sub-Total		10	116	3808								
		Cont. Ed.	Part-time	Total								
all River Beauty Acad	PR	20	10	30								
New Bedford Beauty Academy	PR	10	5	15								
Taunton Beauty Acad	PR	15	8	23								
Swain School of Design	P/I	19	10	29								
Diman Reg. Tech.Inst.	P/I	--	--	NR								
Fall River Academy of Beauty Culture	P/I	--	8	8								
TOTALS				3913	4490	647	5322			831		

See Qualification

		Type	Fall 1972 Headcount of Postsecondary Students Matric.	 NonMatric.	 Total	Fall 1972 Postsecondary Course Registration Credit	 Noncredit	 Total	Degree	For All B.C. and S.T.C. Year Started	 # Enrolled	 Institution	Area Falmout Barnsta
Cape Cod C.C.	CE		NR	NR	1380	1403	459	1862					
	PT		10	2	12	16	--	. 16					
Mass. Maritime	CE		NR	NR	60	20	50	70					
(Hyannis Summer School)		BC									246	Bridgewater	
(Bourne)		STC								1963	73	Northeastern	
(Dennis)		STC									37	Lesley Colleg	
Sub-Total			10	2	1452								
			Cont. Ed.	Part-time	Total								
Wills Flying Service		P/I	--	20	20								
Hyannis Aviation		P/I	--	14(1)	14①								
TOTALS					1486	1439	509	1948			356		

See Qualification

Area: Boston

		Type	Fall 1972 Headcount of Postsecondary Students			Fall 1972 Postsecondary Course Registration			Degree	For All B.C. and S.T.C.		
			Matric.	NonMatric.	Total	Credit	Noncredit	Total		Year Started	# Enrolled	Institution
Boston College Evening	CE	P-2	498	675	1173	2255	72	2327				
Boston College	PT grad	P-2	236	391	627	NR	NR	833				
Boston College School of Management	PT	P-2	219	12	231	NR	NR	310				
Regis College	PT	P-2	52	--	52	NR	NR	98				
U.Mass/Boston	PT	S-2	109	103	212	218	--	218				
Garland J.C.	PT	P-1	10	--	10	27	--	27				
Wentworth Inst.	CE	P-2	--	1009	1009	--	1009	1009				
Mt. Ida Jr. Coll.	PT	P-1	6	--	6	6	--	6				
Mass. Bay C.C.	CE	S-1	156	1975	2131	3234	--	3234				
Wheelock Coll.	CE und	P-2	141	--	141	257	--	257				
	CE grad		1	--	1	1	--	1				
	PT grad		125	--	125	176	--	176				
Hebrew College	CE	P-2	—	140	140	—	140	140				
	PT		70	--	70	145	--	145				
Boston State College	CE und	S-2	79	1049	1128	711	721	1432				
	CE grad		1661	1507	3168	4646	--	4646				
Grahm Jr. Coll.	PT	P-1	18	--	18	18	--	18				
Emmanuel College	PT	P-2	5	4	9	12	--	12				
Radcliffe College	CE	P-2	NR	NR	259	62	230	292				
Pine Manor J.C.	CE	P-1	NR	NR	8	NR	NR	8				
Simmons College	PT und	P-2	NR	NR	327	NR	NR	420				
	PT grad		NR	NR	432	NR	NR	637				
Wellesley College	PT und	P-2	52	--	52	NR	NR	98				
	PT grad		9	--	9	NR	NR	15				
Curry College	CE	P-2	NR	NR	193	62	145	207				
Bentley College	CE	P-2	NR	NR	3248	NR	NR	3163				
Harvard Univer.	CE	P-2	184	4685	4869	4512	2358	6870				
Northeastern Univ.	CE und	P-2	1594	14819	16413	NR	NR	34773				(Lincoln & University Colleges)
	PT grad		3552	--	3552	6067	--	6067				
Babson College	CE	P-2	736	--	736	1170	2	1172				
Suffolk Univ	CE und	P-2	702	291	993	1986	--	1986				
	CE grad		385	332	717	1434	--	1434				
Tufts	CE	P-2	34	34	68	--	218	218				
	PT				NR			NR				
Boston Univ.	CE und		436	3474	3910	NR	NR	5474				
	CE grad		190	—	190							
	PT und		NR	NR	80			NR				
	PT grad		NR	NR	3331			NR				

See Qualification

Area: Boston

Page 2

		Type	Fall 1972 Headcount of Postsecondary Students Matric.	NonMatric.	Total	Fall 1972 Postsecondary Course Registration Credit	Noncredit	Total	Degree	For All B.C. and S.T.C. Year Started	# Enrolled	Institution
esley College	CE und	P-2	391	--	391	391	--	391				
	CE grad		98	--	98	181	--	181				
randeis	CE und	P-2	26	1	28	NR	NR	5174				
	CE grad		82	71	53							
	PT und		--	73	73			NR				
	PT grad		20	38	58			NR				
uin‸y J.C.	CE	munic.	498	985	1483	1385	840	2225				
ewton J.C.	CE	munic.	NR	NR	306	111	295	306				
asell J.C.	PT	P-1	--	40	40	80	--	80				
merson	PT	P-2	NR	NR	78	162	--	162				
Medfield State Hosp)		STC								1972	130	Framingham Stat
Honeywell Corp)		STC										Worcester Poly
Lexington)		BC								1971	60	Middlesex C.C.
A.B.C.D. Extension Center)		BC								1971	210	Middlesex C.C.
Cambridge:Headstart)		STC								1972	25	Middlesex C.C.
Cambridge: Community Language Center)		STC								1972	25	Middlesex C.C.
t. Brigid's Parish)		STC								1971		Middlesex C.C.
eymouth		BC								1965	1982	Northeastern
orwood		BC								1965	508	Northeastern
arvard University		STC								1964	18	Northeastern
rlington High School		STC								1972	140	Boston State
edford High School		STC								1973	250	Boston State
o. Boston High School		STC								1973	60	Boston State
oston		STC									9	Lesley
ambridge		STC									6	Lesley
oxbury		BC								1968	88	Harvard
oston		BC									271	Harvard
ambridge		STC									110	Harvard
Weston H.S.)		STC								1968		Fitchburg State
Curley J.H.)		STC								1968		Fitchburg State
arious field sites		BC								1970	880	U.Mass. Boston
arious locations		STC								1970	426	Mass. Bay C.C.
exington Evening Scl		AE			490			490				
elmont Public Scls		AE			NR			NR				
inthrop Center for AE		AE			573			573				
ilton Public Schools		AE			40			40				
exington Public Scls		AE			395①			395①				
ambridge Public Scls		AE			5600			NR				
oston Public Schools		AE			2031			2500				
Sub-Total			12375	31708	61375							

See Qualification

Area: Boston

Page 3

		Fall 1972 Headcount of Postsecondary Students			Fall 1972 Postsecondary Course Registration				For All B.C. and S.T.C.		
	Type	Matric.	NonMatric.	Total	Credit	Noncredit	Total	Degree	Year Started	# Enrolled	Institution
		Cont. Ed.	Part-time	Total							
Burdett College	P/I	50	10	60							
Mass. Assoc. of Real Estate Boards	P/I	1050	—	1050 [illegible]							
N.E. Institute	P/I	--	—	69							
School of the Museum of Fine Arts	P/I	378	—	378							
Butera School of Art	P/I	53	—	53							
N.E. Educational Ctr.	P/I	—	110	110							
Carney Hospital	P/I	5	--	5							
Barbizon School	P/I	100	400	500							
Episcopal Theological School	P/I	30	—	30							
N.E. School of Photog.	P/I	--	143	143							
College House Study Study	P/I	—	120 [illegible]	120 ⑦							
Academie Moderne	P/I	150	--	150							
Aquinas Jr. College	P-1	--	3	3							
Rittners School	P/I	45	--	45							
Boston Conservatory	P/I	--	510	510							
Mass. College of Pharmacy	P/I	96	—	96							
Academia School of Languages	P/I	125	--	125							
Imageworks	P/I	--	140	140							
Bryant and Stratton	PR	130 ①	--	130 ①							
Hanover Beauty Acad	PR	60	30	90							
Dale Academy of Hairstyling	PR	30	20	50							
ITT Technical Inst.	PR	--	160	160							
The Hickox School	PR	90	80	170							
Modern Gourmet Inc.	P/I	--	500 ①	500 ①							
Coyne Electrical and Technical School	PR	155	--	155							
Eleanor F. Roberts Inst of Electrology	PR	11	6	17							
Career Training Inst.	PR	60	33	93							
Vesper George School of Art	PR	NR	NR	NR							
Carnegie Institute	P/I	--	15	15							
Sales Training Inc.	PR	--	48	48							

See Qualification

Area: Boston

Page 4

		Fall 1972 Headcount of Postsecondary Students			Fall 1972 Postsecondary Course Registration				For All B.C. and S.T.C.		
	Type	Matric.	NonMatric.	Total	Credit	Noncredit	Total	Degree	Year Started	# Enrolled	Institution
N.E. School of Mechanical Dentistry	PR	40	7	47							
Jean Cappy, Inc.	PR	20	20	40							
Insurance Library Assn of Boston	PR	22	—	22							
Mass. School of Barbering	PR	--	4	4							
Bay State Jr. College of Business	PR	—	65	65							
Northeast Inst. of Industrial Technology	P/I	—	267	267							
Hatheway School of Conservation	P/I	—	138	138							
Travel School of Amer.	P/I	—	20	20							
Miss Farmer's School of Cookery	P/I	—	100	100							
Electronic Computer Programming Inst.	P/I	—	53	53							
Berlitz School of Languages	P/I	—	100	100							
Mass. Radio and Electronics	P/I	--	102	102							
Newbury Jr. College	P-1	40	10	50							
Cambridge Jr. College	P/I	--	3	3③							
Cardinal Cushing Coll	P/I	--	3	3③							
Chamberlayne Jr. Coll	P/I	--	60	60③							
Franklin Institute	P/I	--	266	266③							
Hellenic College	P/I	--	13	13③							
Mt. Alvernia	P/I	--	19	19③							
New England Conservatory	P-2	--	61	61③							
N.E. School of Law	P/I	--	127	127③⑩							
Nichols Coll. of Bus. Administration	P-2	--	6	6③							
Oblate Coll & Seminary	P/I	--	3	3③							
Andover -Newton Theological Seminary	P/I	—	80	80③							
Perry School	P/I	—	4	4							
St. Stephen's College	P/I	--	3	3							
N.E. Fuel Institute Tech. Training	PR	20	—	20							
Art Institute of Boston	PR	100	25	125							
Sylvania Technical Scl	P/I	110	—	110							

See Qualification

Area: Boston

Page 5

	Type	Fall 1972 Headcount of Postsecondary Students			Fall 1972 Postsecondary Course Registration			Degree	For All B.C. and S.T.C.		
		Matric.	Nonmatric.	Total	Credit	Noncredit	Total		Year Started	# Enrolled	Institution
General Motors Training Center	P/I	--	20	20							
Project, Inc.	P/I	--	280	280							
Brynan Medix School	P/I	18	—	18							
Carleton-Whitney Aero Services	P/I	—	75	75							
Copley Secretarial Ins	P/I	30	10	40							
John Robert Powers Finishing School	P/I	—	150	150							
Katharine Gibbs	P/I	12	—	12							
Management Development Institute	P/I	20	—	20							
Mary Lentine School of Hair Design	P/I	6	—	6							
School of Fashion Design	P/I	—	75	75							
Academy of Musical Arts	P/I	—	150	150							
Beauty Creator Acad.	P/I	—	15	15							
Inst. of Management Education	P/I	500	--	500							
Longy School of Music	P/I	--	200	200							
Patricia Stevens Scl	P/I	--	30	30							
Donohue Civil Service School	P/I	--	1500	1500							
Malden Business Scl	P/I	35	6	41							
Miss Allen ModelingScl	P/I	--	--	NR							
Peterson's School of Steam Engineering	P/I	--	--	NR							
Wilfred Academy ofHair	P/I	--	--	NR							
Beauty Creator Acad	P/I	--	--	NR							
Carol Nashe School	P/I	--	--	NR							
Debonaire Academy	P/I	--	--	NR							
DiAnthony School of Cosmetology	P/I	--	--	NR							
Henry Simmons School of Floral Design	P/I	--	--	NR							
LaNewton School of Beauty Culture	P/I	--	--	NR							
Mansfield Beauty Acad	P/I	63	21	84							
Mary Brooks School	P/I	--	--	NR							
Neponset Circle Welding School	P/I	--	--	NR							

See Qualification

		Fall 1972 Headcount of Postsecondary Students			Fall 1972 Postsecondary Course Registration				For All B.C. and S.T.C.			Are
	Type	Matric.	NonMatric.	Total	Credit	Noncredit	Total	Degree	Year Started	# Enrolled	Institution	Bosto Page
N.E. School of Hypnotism	P/I	--	--	NR								
Rbt. Richard Beauty Academy	P/I	--	--	NR								
N.E. Tractor Trailor	P/I	65	--	65								
Quincy Beauty Academy	P/I	5	3	8								
Miss Kelley's School of Electrology	P/I	2	--	2								
Stenotype International	P/I	--	--	NR								
Tech-Age Business Scl	P/I	30	10	40								
Touch Shorthand Acad	P/I	--	--	NR								
Becker CPA Review Cse	P/I	--	--	NR								
Woburn Business Scl	P/I	13①	--	13①								
Willet Inst. of Finance	P/I	45①	--	45①								
Mass. College of Optometry	P/I	--	--	NR								
Academy of MusicalArts	P/I	--	150	150								
Fashion Signatures	P/I	--	--	NR								
Griffith School of Speech	P/I	--	--	NR								
Inst. of Management Ed	P/I	500	--	500								
Ryder Tech. Inst.	P/I	--	--	NR								
Cades CPA School	P/I	--	--	NR								
Dolan Gertrude Theatrical Studios	P/I	--	--	NR								
Farr Academy	P/I	--	--	NR								
Orson Welles Film Scl.	P/I	--	--	NR								
So. Shore Conservatory of Music	P/I	--	--	NR								
Ingo Conservatory of Music	P/I	--	--	NR								

II.A.2. MAPS: RESIDENCES OF STUDENTS ATTENDING EACH INSTITUTION

(DENSITY MAPS)

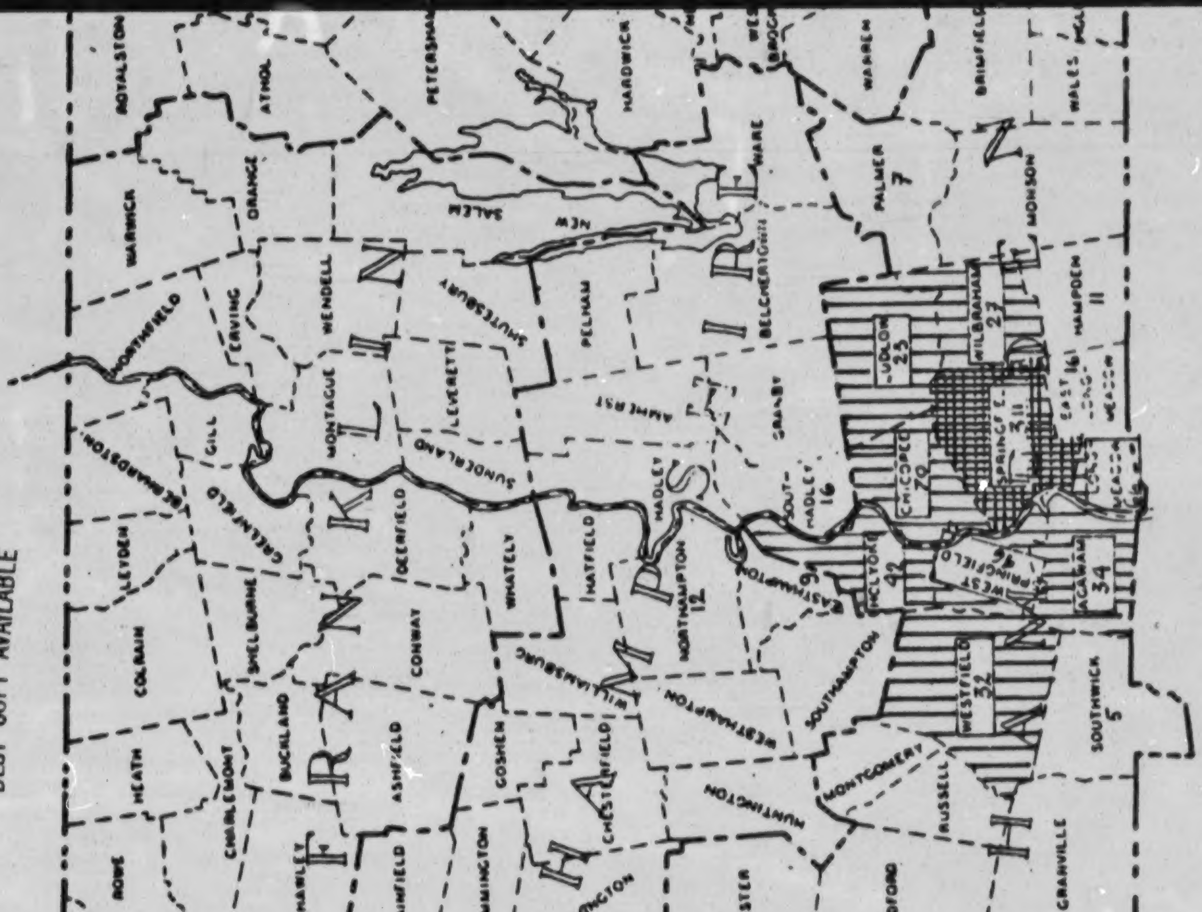
Maps for continuing education students and for part-time students could not be prepared for every institution, but most are presented in the following pages. The reasons why certain maps do not appear are that a) data on residence of students could not be obtained from the institution, or b) the institution has no part-time or continuing education program. (See table of total enrollments, section II.B. for identification of existing programs.)

SPRINGFIELD

GEOGRAPHIC SERVICE AREA

(Western Region)

BEST COPY AVAILABLE


FRANKLIN
HAMPSHIRE
HAMPDEN
BERKSHIRE
ROYALSTON
ATHOL
PETERSHAM
HARDWICK
WARREN
BRIMFIELD
WALES
WARWICK
ORANGE
NEW SALEM
WARE
PALMER 7
MONSON
NORTHFIELD
ERVING
WENDELL
SHUTESBURY
PELHAM
BELCHERTOWN
LUDLOW 25
WILBRAHAM 27
HAMPDEN 11
GILL
MONTAGUE
LEVERETT
AMHERST
GRANBY
SPRINGFIELD 311
EAST LONGMEADOW 161
LONGMEADOW
BERNARDSTON
GREENFIELD
SUNDERLAND
HADLEY
SOUTH HADLEY 16
CHICOPEE 70
LEYDEN
DEERFIELD
WHATELY
HATFIELD
NORTHAMPTON 12
EASTHAMPTON 9
HOLYOKE 42
WEST SPRINGFIELD 46
AGAWAM 34
COLRAIN
SHELBURNE
CONWAY
WILLIAMSBURG
WESTHAMPTON
SOUTHAMPTON
WESTFIELD 32
SOUTHWICK 5
HEATH
CHARLEMONT
BUCKLAND
ASHFIELD
GOSHEN
CHESTERFIELD
HUNTINGTON
MONTGOMERY
RUSSELL
GRANVILLE
ROWE
HAWLEY
PLAINFIELD
CUMMINGTON
WORTHINGTON
CHESTER
BLANDFORD
TOLLAND
MONROE
FLORIDA
SAVOY
WINDSOR
PERU
MIDDLEFIELD
BECKET
OTIS
SANDISFIELD
CLARKSBURG
NORTH ADAMS
ADAMS
CHESHIRE
HINSDALE
DALTON
WASHINGTON
LEE
TYRINGHAM
MONTEREY
NEW MARLBOROUGH
WILLIAMSTOWN
NEW ASHFORD
LANESBOROUGH
PITTSFIELD
LENOX
STOCKBRIDGE
GREAT BARRINGTON
SHEFFIELD
HANCOCK
RICHMOND
WEST STOCKBRIDGE
ALFORD
EGREMONT
MOUNT WASHINGTON

LEGEND

☐ 0-2%

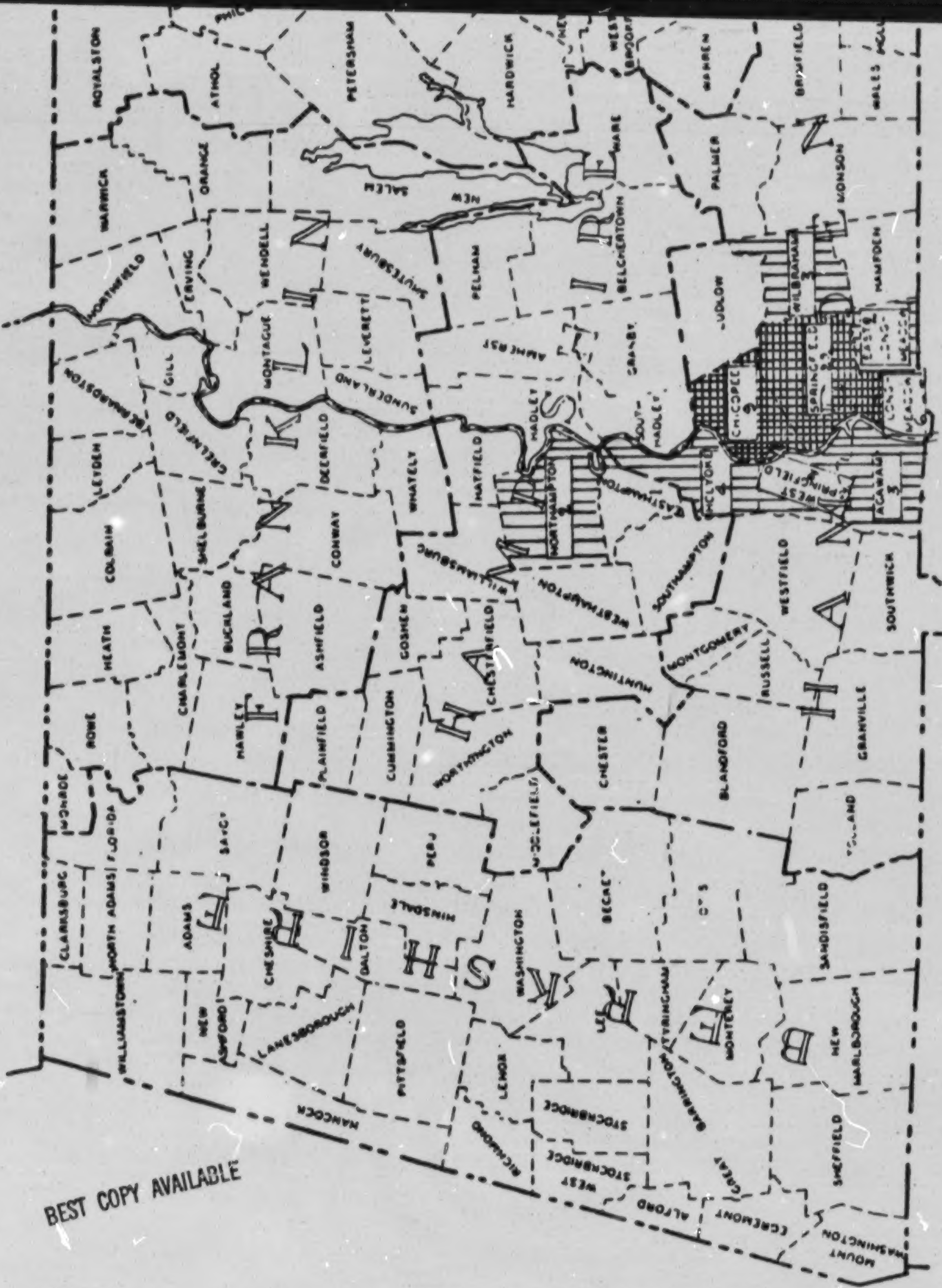
▥ 2-8%

▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING CONTINUING EDUCATION

AMERICAN INTERNATIONAL COLLEGE

TOTAL REPORTED: 892
NOTE: TOWNS WITH LESS THAN FIVE STUDENTS ARE OMITTED


FRANKLIN
HAMPSHIRE
HAMPDEN
BERKSHIRE
ROYALSTON
ATHOL
PETERSHAM
HARDWICK
WARREN
BRIMFIELD
WALES
WARWICK
ORANGE
SALEM
NEW
WARE
PALMER
MONSON
NORTHFIELD
ERVING
WENDELL
SHUTESBURY
PELHAM
BELCHERTOWN
LUDLOW
WILBRAHAM
HAMPDEN
BERNARDSTON
GILL
MONTAGUE
LEVERETT
AMHERST
GRANBY
CHICOPEE
9
SPRINGFIELD
EAST LONGMEADOW
LONGMEADOW
6
LEYDEN
GREENFIELD
DEERFIELD
SUNDERLAND
HADLEY
SOUTH HADLEY
HOLYOKE
4
WEST SPRINGFIELD
AGAWAM
3
COLRAIN
SHELBURNE
CONWAY
WHATELY
HATFIELD
NORTHAMPTON
EASTHAMPTON
SOUTHAMPTON
WESTFIELD
SOUTHWICK
HEATH
CHARLEMONT
BUCKLAND
ASHFIELD
GOSHEN
WILLIAMSBURG
WESTHAMPTON
MONTGOMERY
RUSSELL
ROWE
HAWLEY
PLAINFIELD
CUMMINGTON
CHESTERFIELD
WORTHINGTON
HUNTINGTON
CHESTER
BLANDFORD
GRANVILLE
MONROE
FLORIDA
SAVOY
WINDSOR
PERU
MIDDLEFIELD
BECKET
OTIS
TOLLAND
CLARKSBURG
NORTH ADAMS
ADAMS
CHESHIRE
HINSDALE
DALTON
WASHINGTON
SANDISFIELD
WILLIAMSTOWN
NEW ASHFORD
LANESBOROUGH
PITTSFIELD
LENOX
LEE
TYRINGHAM
MONTEREY
NEW MARLBOROUGH
HANCOCK
RICHMOND
STOCKBRIDGE
WEST STOCKBRIDGE
GREAT BARRINGTON
SHEFFIELD
ALFORD
EGREMONT
MOUNT WASHINGTON

BEST COPY AVAILABLE

LEGEND

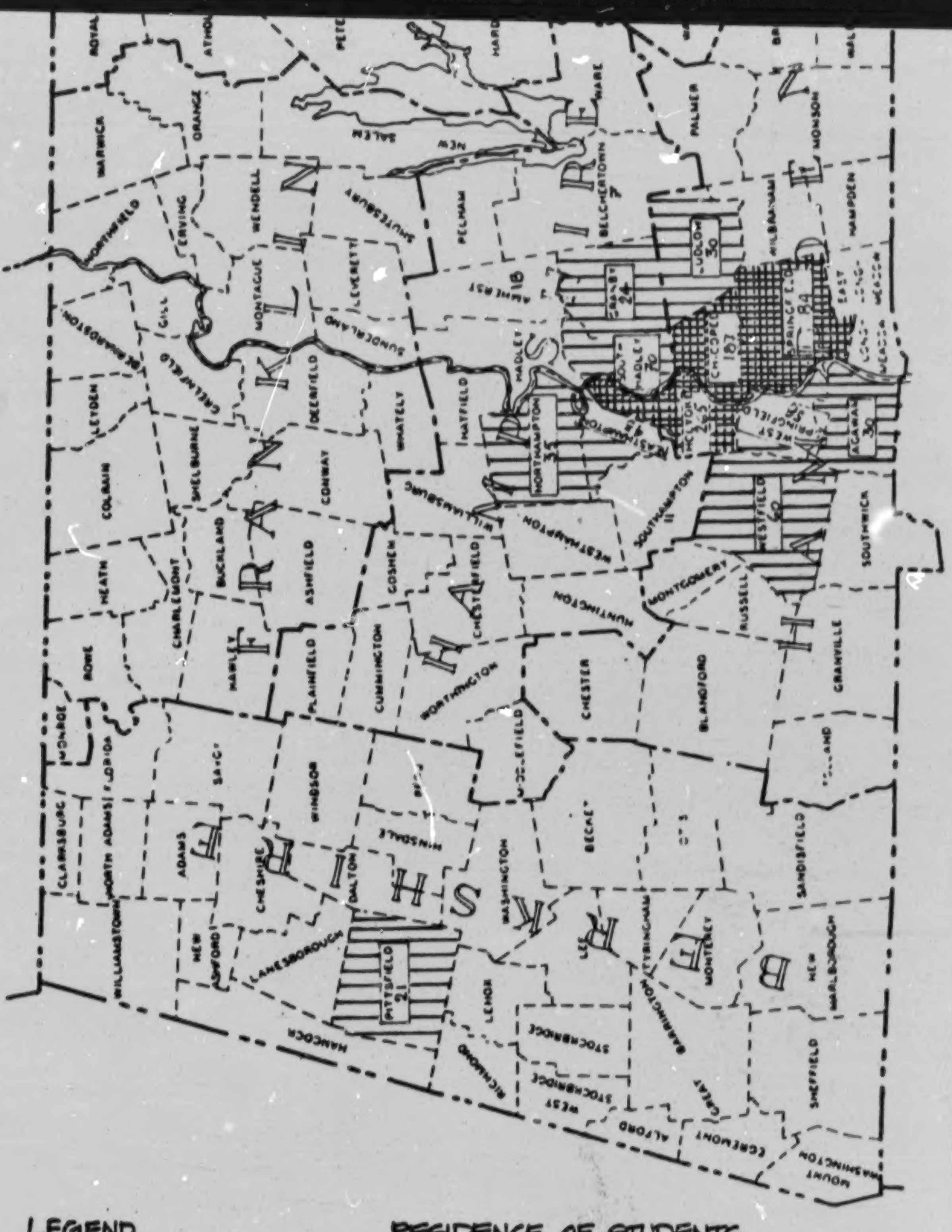
☐	0-2%
▥	2-8%
▦	ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING PART-TIME IN REGULAR COLLEGE PROGRAM

AMERICAN INTERNATIONAL COLLEGE

TOTAL REPORTED: 70

BEST COPY AVAILABLE


FRANKLIN
HAMPSHIRE
HAMPDEN
BERKSHIRE
ROYAL
WARWICK
ORANGE
ATHOL
SALEM
NEW
WARE
PALMER
MONSON
NORTHFIELD
ERVING
WENDELL
SHUTESBURY
PELHAM
BELCHERTOWN 7
LUDLOW 30
WILBRAHAM
HAMPDEN
BERNARDSTON
GILL
MONTAGUE
LEVERETT
AMHERST 18
GRANBY 24
CHICOPEE 187
SPRINGFIELD 84
EAST LONGMEADOW
LONGMEADOW
LEYDEN
GREENFIELD
SUNDERLAND
HADLEY
SO. HADLEY 70
HOLYOKE 265
WEST SPRINGFIELD 58
AGAWAM 30
COLRAIN
SHELBURNE
DEERFIELD
WHATELY
HATFIELD
NORTHAMPTON 35
EASTHAMPTON 48
SOUTHAMPTON 11
WESTFIELD 60
SOUTHWICK
HEATH
CHARLEMONT
BUCKLAND
ASHFIELD
CONWAY
WILLIAMSBURG
WESTHAMPTON
MONTGOMERY
RUSSELL
GOSHEN
CHESTERFIELD
HUNTINGTON
GRANVILLE
ROWE
HAWLEY
PLAINFIELD
CUMMINGTON
WORTHINGTON
CHESTER
BLANDFORD
MONROE
FLORIDA
SAVOY
WINDSOR
PERU
MIDDLEFIELD
TOLLAND
CLARKSBURG
NORTH ADAMS
ADAMS
CHESHIRE
DALTON
HINSDALE
WASHINGTON
BECKET
OTIS
SANDISFIELD
WILLIAMSTOWN
NEW ASHFORD
LANESBOROUGH
PITTSFIELD 21
LEE
TYRINGHAM
MONTEREY
NEW MARLBOROUGH
HANCOCK
LENOX
STOCKBRIDGE
GREAT BARRINGTON
SHEFFIELD
RICHMOND
WEST STOCKBRIDGE
ALFORD
EGREMONT
MOUNT WASHINGTON

LEGEND

☐ 0-2%

▥ 2-8%

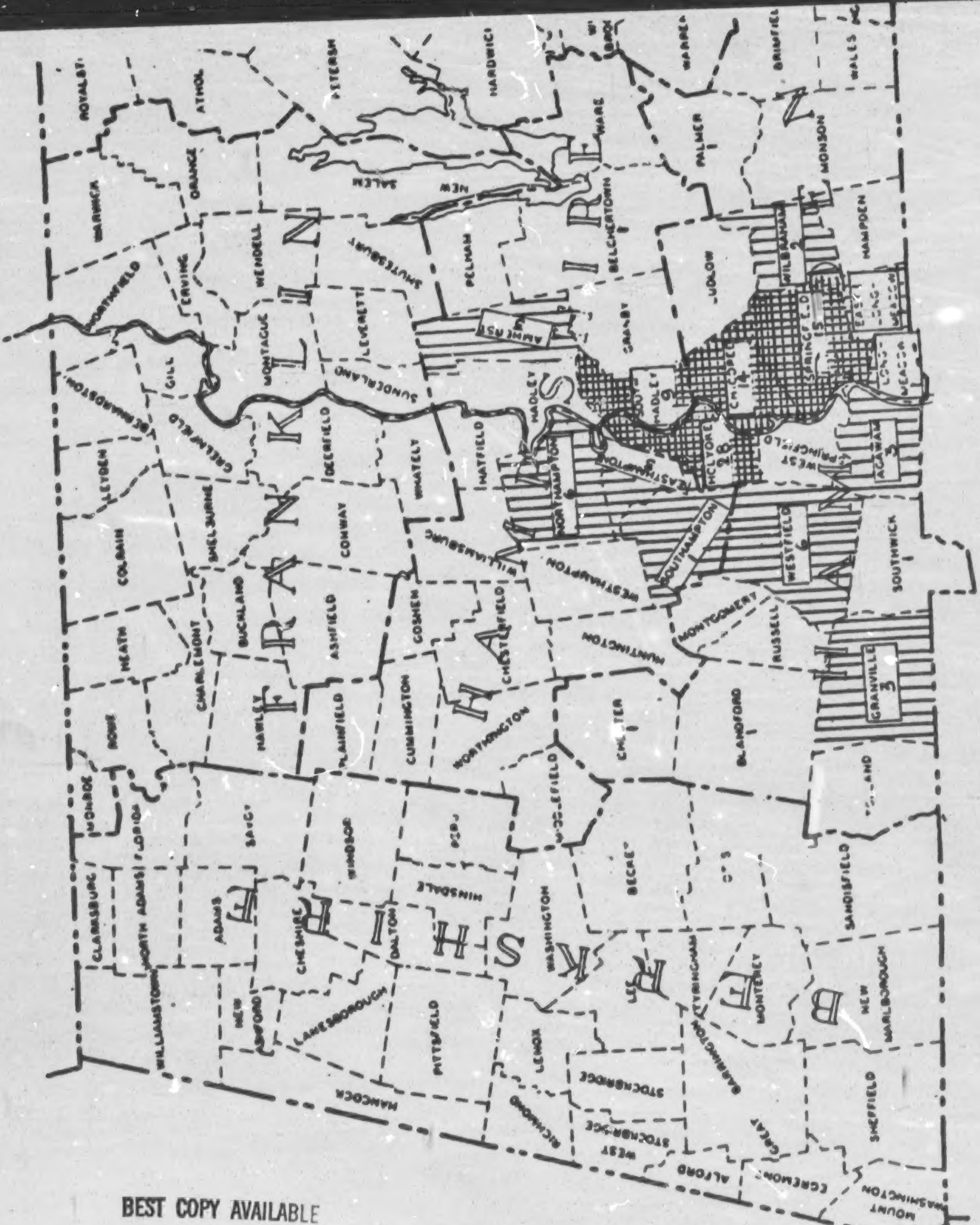
▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING CONTINUING EDUCATION

HOLYOKE COMMUNITY COLLEGE

TOTAL REPORTED: 1,017

NOTE: TOWNS WITH LESS THAN SIX STUDENTS ARE OMITTED.



FRANKLIN
HAMPSHIRE
HAMPDEN
BERKSHIRE
ROYALSTON
ATHOL
PETERSHAM
HARDWICK
WARE
WARREN
BRIMFIELD
WALES
WARWICK
ORANGE
NEW SALEM
PALMER
MONSON
NORTHFIELD
ERVING
WENDELL
SHUTESBURY
PELHAM
BELCHERTOWN
LUDLOW
WILBRAHAM 2
HAMPDEN
MONTAGUE
LEVERETT
AMHERST
GRANBY
EAST LONGMEADOW
BERNARDSTON
GILL
SUNDERLAND
HADLEY
SOUTH HADLEY 9
CHICOPEE 14
SPRINGFIELD 15
LONGMEADOW
LEYDEN
GREENFIELD
DEERFIELD
WHATELY
HATFIELD
NORTHAMPTON
EASTHAMPTON 5
HOLYOKE 28
WEST SPRINGFIELD
AGAWAM 3
COLRAIN
SHELBURNE
CONWAY
WILLIAMSBURG
WESTHAMPTON
SOUTHAMPTON 1
WESTFIELD 6
SOUTHWICK 1
HEATH
CHARLEMONT
BUCKLAND
ASHFIELD
GOSHEN
CHESTERFIELD
MONTGOMERY
HUNTINGTON
RUSSELL
GRANVILLE 3
ROWE
HAWLEY
PLAINFIELD
CUMMINGTON
WORTHINGTON
CHESTER 1
BLANDFORD 1
TOLLAND
MONROE
FLORIDA
SAVOY
WINDSOR
PERU
MIDDLEFIELD
BECKET
OTIS
SANDISFIELD
CLARKSBURG
NORTH ADAMS
ADAMS
CHESHIRE
HINSDALE
DALTON
WASHINGTON
LEE
TYRINGHAM
MONTEREY
NEW MARLBOROUGH
WILLIAMSTOWN
NEW ASHFORD
LANESBOROUGH
PITTSFIELD
LENOX
STOCKBRIDGE
GREAT BARRINGTON
SHEFFIELD
HANCOCK
RICHMOND
WEST STOCKBRIDGE
ALFORD
EGREMONT
MOUNT WASHINGTON

BEST COPY AVAILABLE

LEGEND

☐ 0-2%

▥ 2-8%

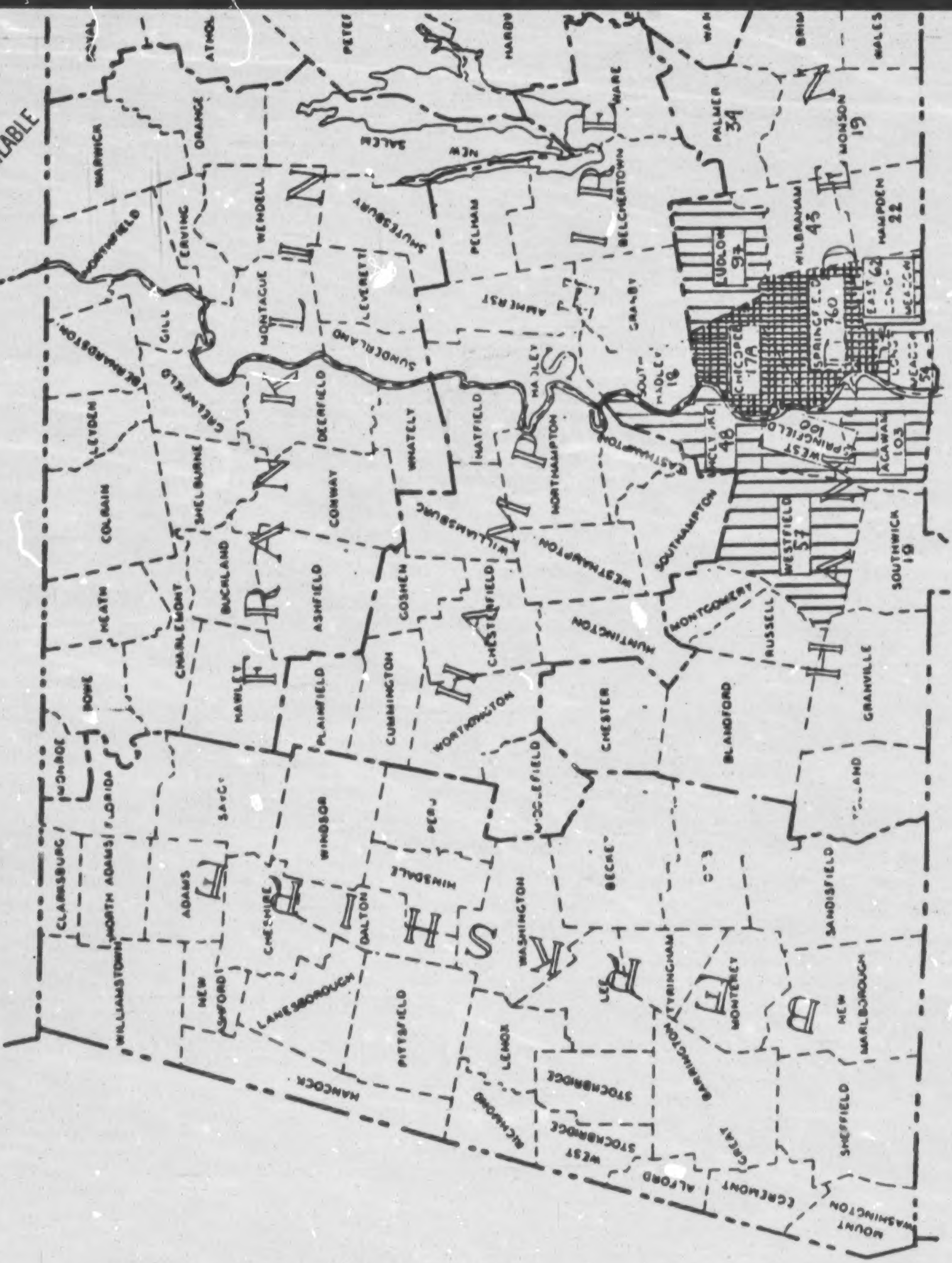
▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING PART-TIME IN REGULAR COLLEGE PROGRAM

HOLYOKE COMMUNITY COLLEGE

TOTAL REPORTED: 102

BEST COPY AVAILABLE


FRANKLIN
HAMPSHIRE
HAMPDEN
BERKSHIRE
PALMER 34
MONSON 19
WILBRAHAM 43
HAMPDEN 22
LUDLOW 97
SPRINGFIELD 760
EAST LONGMEADOW 62
LONGMEADOW 34
CHICOPEE 174
SOUTH HADLEY 16
HOLYOKE 48
WEST SPRINGFIELD 100
AGAWAM 103
WESTFIELD 57
SOUTHWICK 19
BELCHERTOWN
GRANBY
AMHERST
HADLEY
NORTHAMPTON
EASTHAMPTON
SOUTHAMPTON
MONTGOMERY
RUSSELL
GRANVILLE
BLANDFORD
CHESTER
HUNTINGTON
WESTHAMPTON
WILLIAMSBURG
CHESTERFIELD
WORTHINGTON
CUMMINGTON
GOSHEN
PLAINFIELD
ASHFIELD
CONWAY
WHATELY
HATFIELD
DEERFIELD
SUNDERLAND
LEVERETT
SHUTESBURY
PELHAM
WARE
MONTAGUE
WENDELL
ERVING
NORTHFIELD
WARWICK
ORANGE
GILL
BERNARDSTON
GREENFIELD
LEYDEN
COLRAIN
SHELBURNE
BUCKLAND
HEATH
CHARLEMONT
HAWLEY
ROWE
MONROE
FLORIDA
CLARKSBURG
NORTH ADAMS
ADAMS
SAVOY
WINDSOR
PERU
HINSDALE
DALTON
CHESHIRE
NEW ASHFORD
WILLIAMSTOWN
LANESBOROUGH
PITTSFIELD
HANCOCK
RICHMOND
LENOX
WASHINGTON
BECKET
MIDDLEFIELD
OTIS
SANDISFIELD
TOLLAND
LEE
STOCKBRIDGE
WEST STOCKBRIDGE
GREAT BARRINGTON
TYRINGHAM
MONTEREY
NEW MARLBOROUGH
SHEFFIELD
ALFORD
EGREMONT
MOUNT WASHINGTON

LEGEND

☐ 0-2%

▥ 2-8%

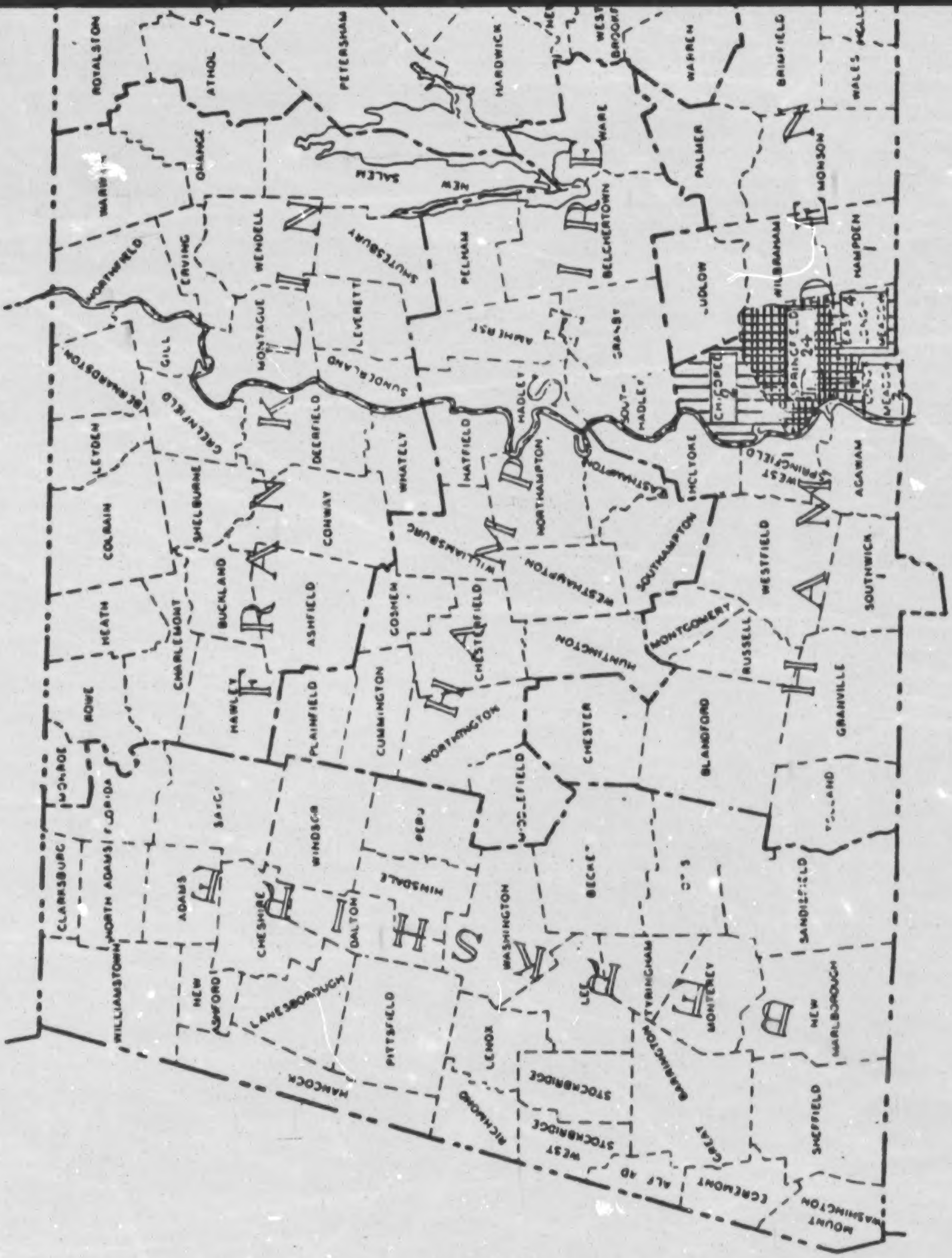
▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING CONTINUING EDUCATION

SPRINGFIELD TECHNICAL COMMUNITY COLLEGE

TOTAL REPORTED: 1802

NOTE: TOWNS WHICH HAVE LESS THAN NINE STUDENTS ARE OMITTED


FRANKLIN
HAMPSHIRE
HAMPDEN
BERKSHIRE
ROYALSTON
ATHOL
PETERSHAM
HARDWICK
WARE
WARREN
BRIMFIELD
WALES
WARWICK
ORANGE
SALEM
NEW
PALMER
MONSON
NORTHFIELD
ERVING
WENDELL
SHUTESBURY
PELHAM
BELCHERTOWN
LUDLOW
WILBRAHAM
HAMPDEN
GILL
MONTAGUE
LEVERETT
AMHERST
GRANBY
SPRINGFIELD
24
BERNARDSTON
GREENFIELD
SUNDERLAND
DEERFIELD
HADLEY
SOUTH HADLEY
CHICOPEE
LEYDEN
HATFIELD
WHATELY
NORTHAMPTON
EASTHAMPTON
HOLYOKE
WEST SPRINGFIELD
AGAWAM
COLRAIN
SHELBURNE
CONWAY
WILLIAMSBURG
WESTHAMPTON
SOUTHAMPTON
WESTFIELD
SOUTHWICK
HEATH
CHARLEMONT
BUCKLAND
ASHFIELD
GOSHEN
CHESTERFIELD
MONTGOMERY
RUSSELL
HUNTINGTON
ROWE
HAWLEY
PLAINFIELD
CUMMINGTON
WORTHINGTON
CHESTER
BLANDFORD
GRANVILLE
MONROE
FLORIDA
MIDDLEFIELD
CLARKSBURG
NORTH ADAMS
ADAMS
WINDSOR
PERU
HINSDALE
BECKET
SANDISFIELD
WILLIAMSTOWN
NEW ASHFORD
CHESHIRE
DALTON
WASHINGTON
LEE
TYRINGHAM
MONTEREY
NEW MARLBOROUGH
LANESBOROUGH
PITTSFIELD
LENOX
STOCKBRIDGE
GREAT BARRINGTON
HANCOCK
RICHMOND
WEST STOCKBRIDGE
SHEFFIELD
ALF RD
EGREMONT
MOUNT WASHINGTON

LEGEND

☐ 0-2%

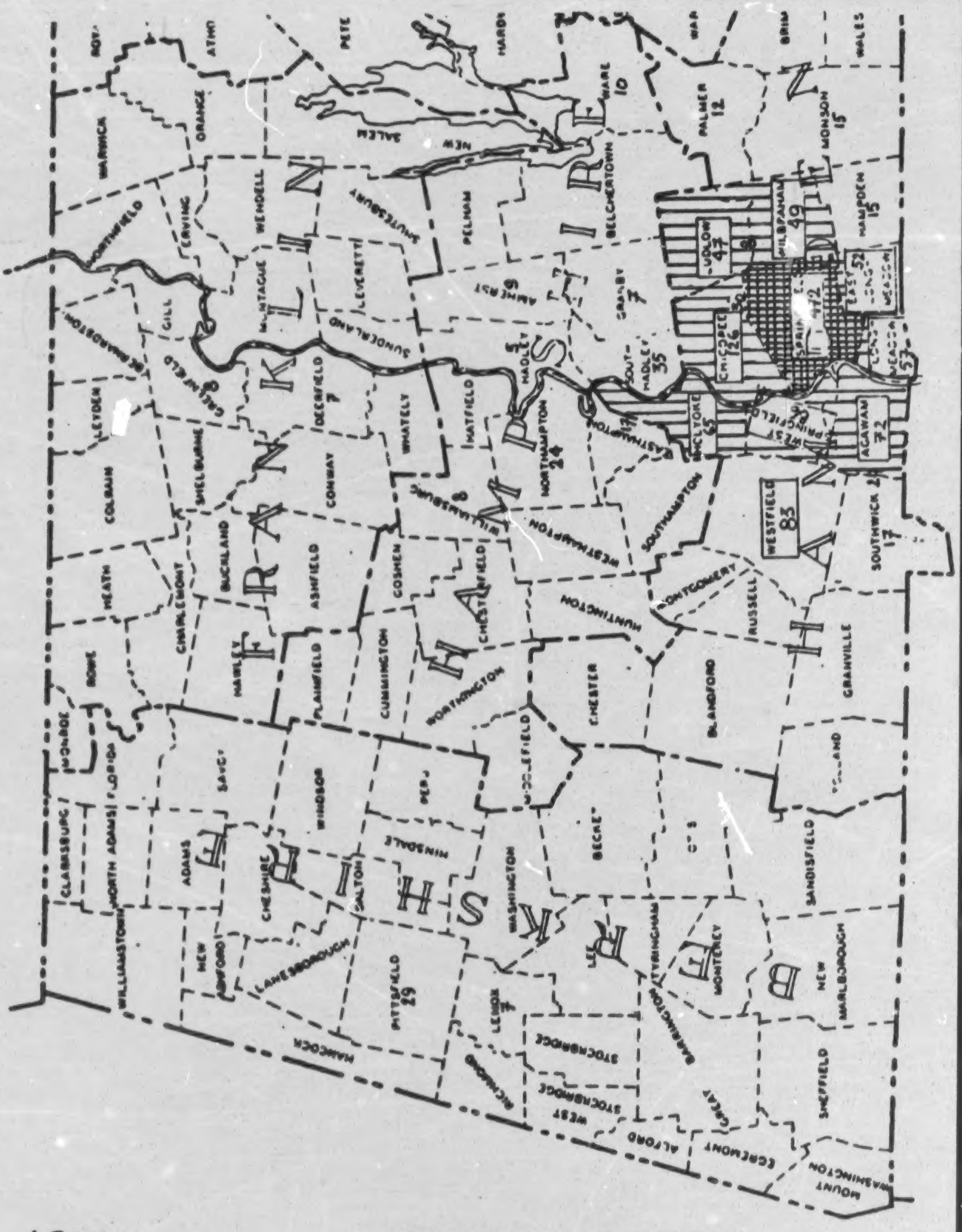
▥ 2-8%

▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING PART-TIME IN REGULAR COLLEGE PROGRAM

SPRINGFIELD TECHNICAL COMMUNITY COLLEGE

TOTAL REPORTED: 39


FRANKLIN
HAMPSHIRE
HAMPDEN
BERKSHIRE
WARE 10
PALMER 12
MONSON 15
WILBRAHAM 49
HAMPDEN 15
LUDLOW 47
SPRINGFIELD 472
EAST LONGMEADOW 52
LONGMEADOW 57
CHICOPEE 126
HOLYOKE 65
WEST SPRINGFIELD 38
AGAWAM 72
WESTFIELD 83
SOUTHWICK 17
SOUTH HADLEY 35
GRANBY 7
AMHERST 9
HADLEY 5
EASTHAMPTON 17
NORTHAMPTON 24
WILLIAMSBURG 8
DEERFIELD 7
GREENFIELD 8
PITTSFIELD 29
LENOX 7
BELCHERTOWN
PELHAM
SOUTHAMPTON
MONTGOMERY
RUSSELL
GRANVILLE
BLANDFORD
CHESTER
HUNTINGTON
WESTHAMPTON
CHESTERFIELD
WORTHINGTON
GOSHEN
CUMMINGTON
PLAINFIELD
HATFIELD
WHATELY
SUNDERLAND
LEVERETT
SHUTESBURY
MONTAGUE
WENDELL
ERVING
NORTHFIELD
GILL
WARWICK
ORANGE
NEW SALEM
CONWAY
ASHFIELD
BUCKLAND
SHELBURNE
COLRAIN
LEYDEN
BERNARDSTON
HEATH
CHARLEMONT
HAWLEY
ROWE
MONROE
FLORIDA
CLARKSBURG
NORTH ADAMS
ADAMS
SAVOY
WINDSOR
PERU
HINSDALE
DALTON
CHESHIRE
WILLIAMSTOWN
NEW ASHFORD
LANESBOROUGH
HANCOCK
RICHMOND
WASHINGTON
BECKET
LEE
STOCKBRIDGE
WEST STOCKBRIDGE
GREAT BARRINGTON
TYRINGHAM
MONTEREY
SANDISFIELD
NEW MARLBOROUGH
SHEFFIELD
EGREMONT
ALFORD
MOUNT WASHINGTON
ROY
ATHOL
PETE
HARDW
WAR
BRIM
WALES

LEGEND

☐ 0-2%

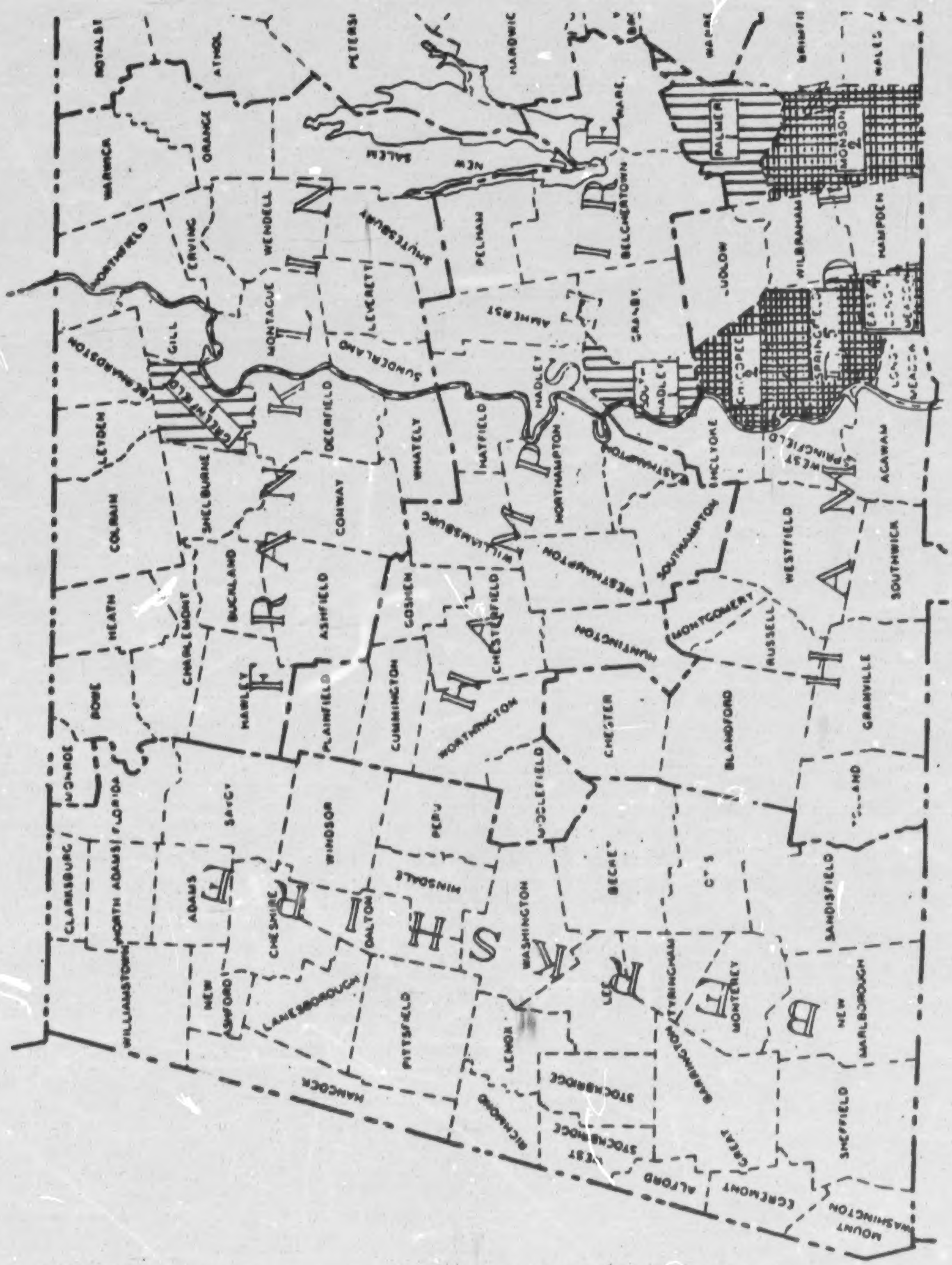
▥ 2-8%

▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING EVENING DIVISION.

WESTERN NEW ENGLAND COLLEGE

TOTAL REPORTED: 1,902
NOTE: TOWNS WITH LESS THAN FIVE STUDENTS ARE OMITTED.


FRANKLIN
HAMPSHIRE
BERKSHIRE
HAM
PALMER
MONSON
CHICOPEE
SPRINGFIELD
EAST LONGMEADOW
LONGMEADOW
SOUTH HADLEY
GREENFIELD

LEGEND

☐ 0-2%

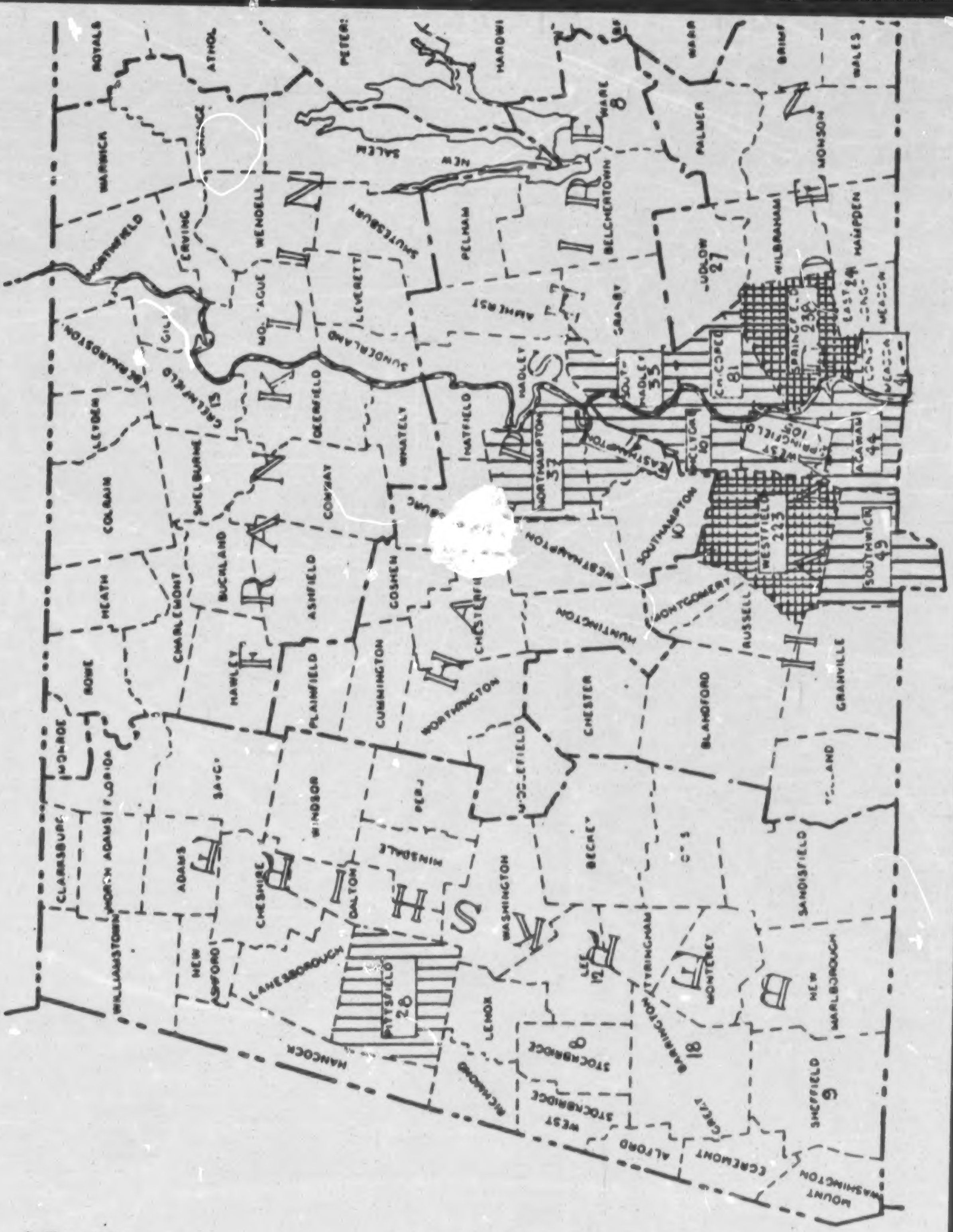
▥ 2-8%

▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING PART-TIME IN REGULAR COLLEGE PROGRAM

WESTERN NEW ENGLAND COLLEGE

TOTAL REPORTED: 22


FRANKLIN
HAMPSHIRE
HAMPDEN
BERKSHIRE
NORTHAMPTON 37
SOUTH HADLEY 55
CHICOPEE 81
HOLYOKE 101
WEST SPRINGFIELD 101
AGAWAM 44
WESTFIELD 223
SOUTHWICK 49
SOUTHAMPTON 10
LUDLOW 27
WARE 8
EAST LONGMEADOW 24
LONGMEADOW 41
PITTSFIELD 26
LEE 12
STOCKBRIDGE 8
GREAT BARRINGTON 18
SHEFFIELD 9

LEGEND

☐ 0-2%

▥ 2-8%

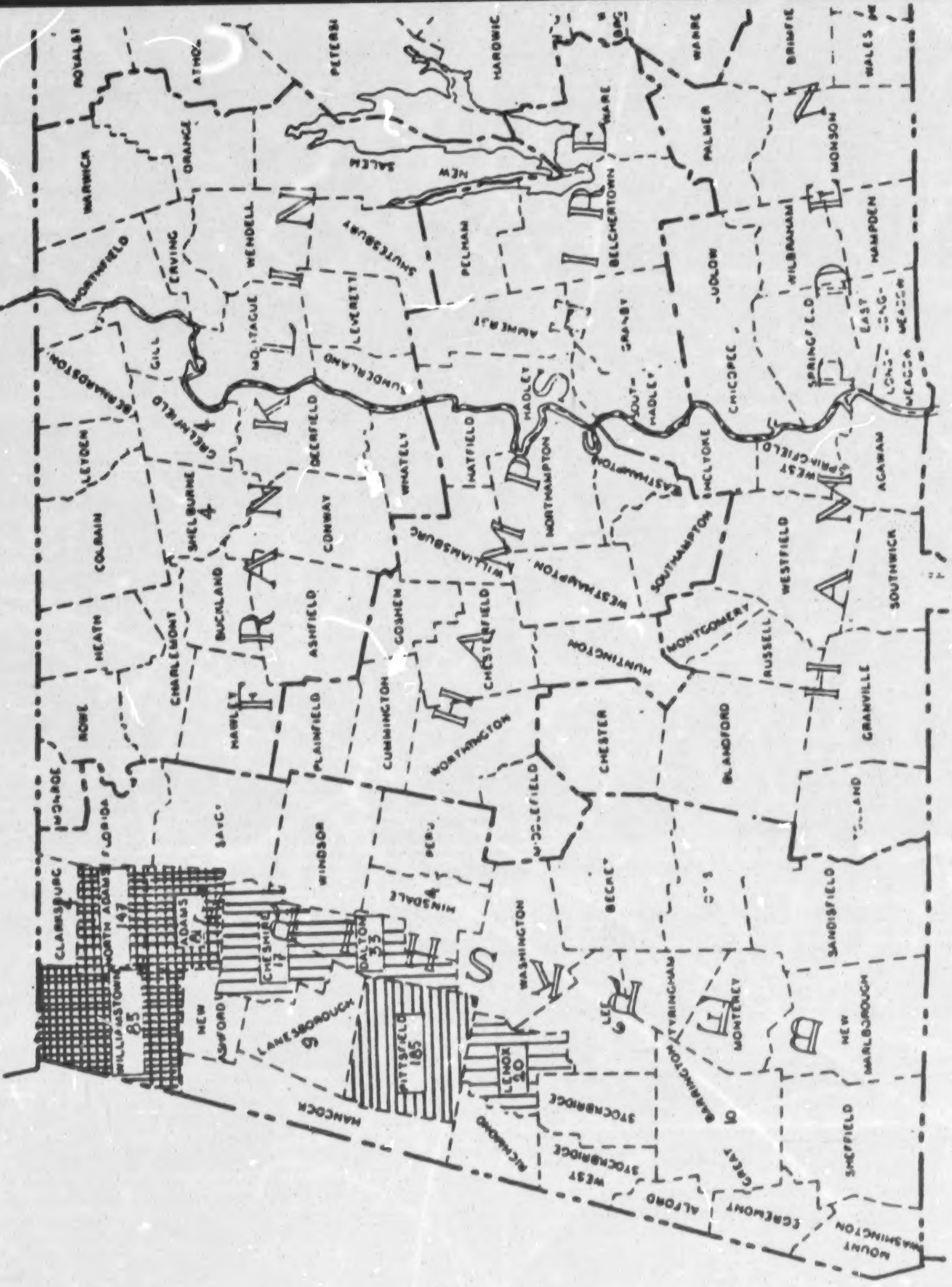
▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING CONTINUING EDUCATION

WESTFIELD STATE COLLEGE

TOTAL REPORTED: 1397
NOTE: TOWNS WITH LESS THAN SEVEN STUDENTS ARE OMITTED.

PITTSFIELD/NORTH ADAMS
GEOGRAPHIC SERVICE AREA
(Western Region)



FRANKLIN
HAMPSHIRE
HAMPDEN
BERKSHIRE
NORTH ADAMS 147
WILLIAMSTOWN 85
ADAMS
CLARKSBURG
CHESHIRE 17
DALTON 33
PITTSFIELD 185
LENOX 20
LANESBOROUGH 9
HINSDALE 4
GREENFIELD 4
SHELBURNE 4

LEGEND

☐ 0-2%

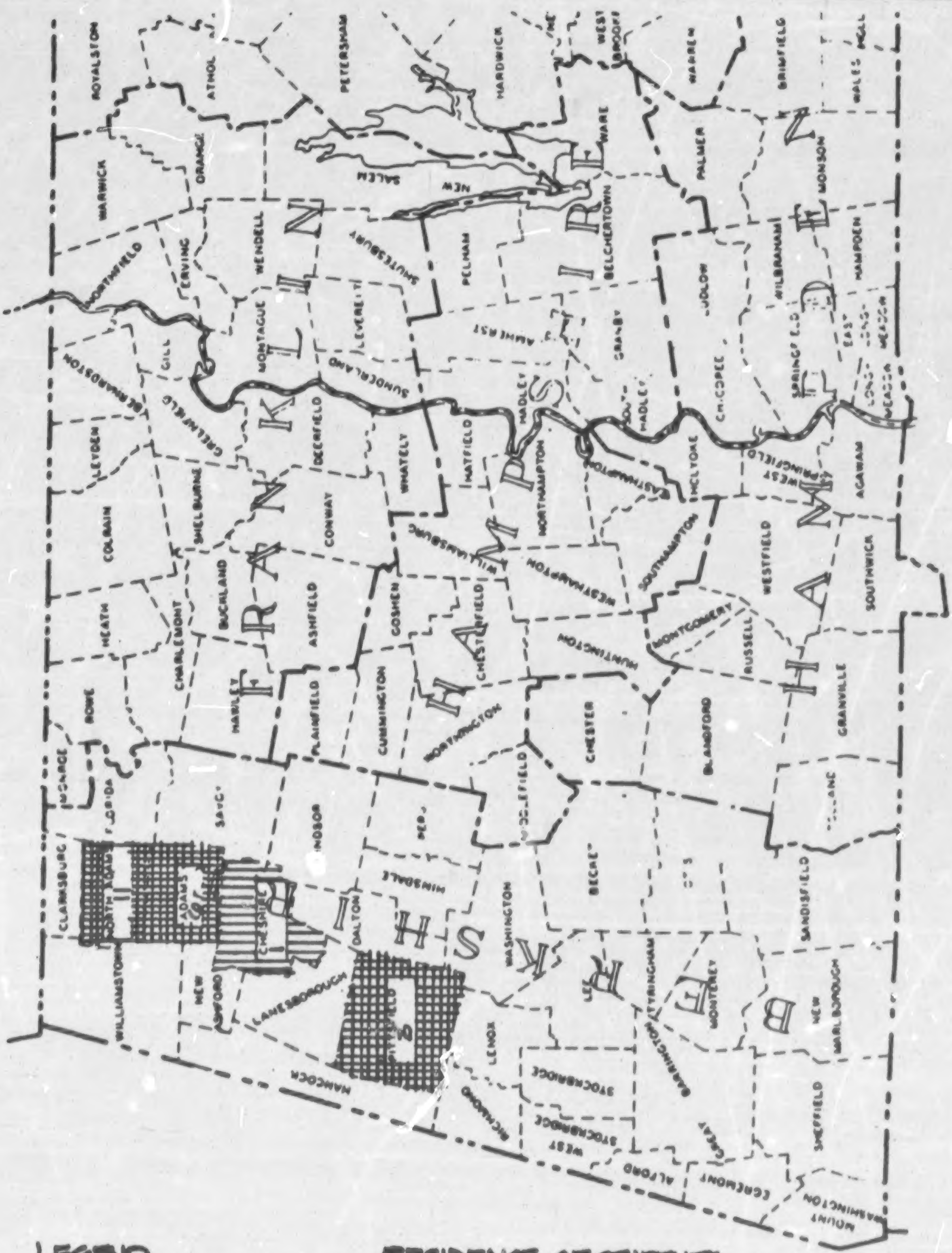
▥ 2-8%

▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING CONTINUING EDUCATION.

NORTH ADAMS STATE COLLEGE

TOTAL REPORTED: 758
NOTE: TOWNS WITH LESS THAN FOUR STUDENTS ARE OMITTED.



FRANKLIN
HAMPSHIRE
HAMPDEN
BERKSHIRE
ROYALSTON
ATHOL
PETERSHAM
HARDWICK
WEST BROOKFIELD
WARREN
BRIMFIELD
WALES
HOLLAND
WARWICK
ORANGE
SALEM
NEW SALEM
WARE
PALMER
MONSON
NORTHFIELD
ERVING
WENDELL
SHUTESBURY
PELHAM
BELCHERTOWN
WILBRAHAM
HAMPDEN
LUDLOW
EAST LONGMEADOW
LONGMEADOW
BERNARDSTON
GILL
MONTAGUE
LEVERETT
AMHERST
GRANBY
CHICOPEE
SPRINGFIELD
LEYDEN
GREENFIELD
SUNDERLAND
HADLEY
SOUTH HADLEY
COLRAIN
SHELBURNE
DEERFIELD
WHATELY
HATFIELD
NORTHAMPTON
EASTHAMPTON
HOLYOKE
WEST SPRINGFIELD
AGAWAM
HEATH
CHARLEMONT
BUCKLAND
CONWAY
ASHFIELD
WILLIAMSBURG
WESTHAMPTON
SOUTHAMPTON
WESTFIELD
SOUTHWICK
GOSHEN
CHESTERFIELD
HUNTINGTON
MONTGOMERY
RUSSELL
GRANVILLE
ROWE
HAWLEY
PLAINFIELD
CUMMINGTON
WORTHINGTON
CHESTER
BLANDFORD
TOLLAND
MONROE
FLORIDA
SAVOY
WINDSOR
PERU
MIDDLEFIELD
BECKET
OTIS
SANDISFIELD
CLARKSBURG
NORTH ADAMS
ADAMS
CHESHIRE
HINSDALE
DALTON
WASHINGTON
LEE
TYRINGHAM
MONTEREY
NEW MARLBOROUGH
WILLIAMSTOWN
NEW ASHFORD
LANESBOROUGH
PITTSFIELD
LENOX
STOCKBRIDGE
GREAT BARRINGTON
SHEFFIELD
HANCOCK
RICHMOND
WEST STOCKBRIDGE
ALFORD
EGREMONT
MOUNT WASHINGTON

LEGEND

☐ 0-2%

▥ 2-8%

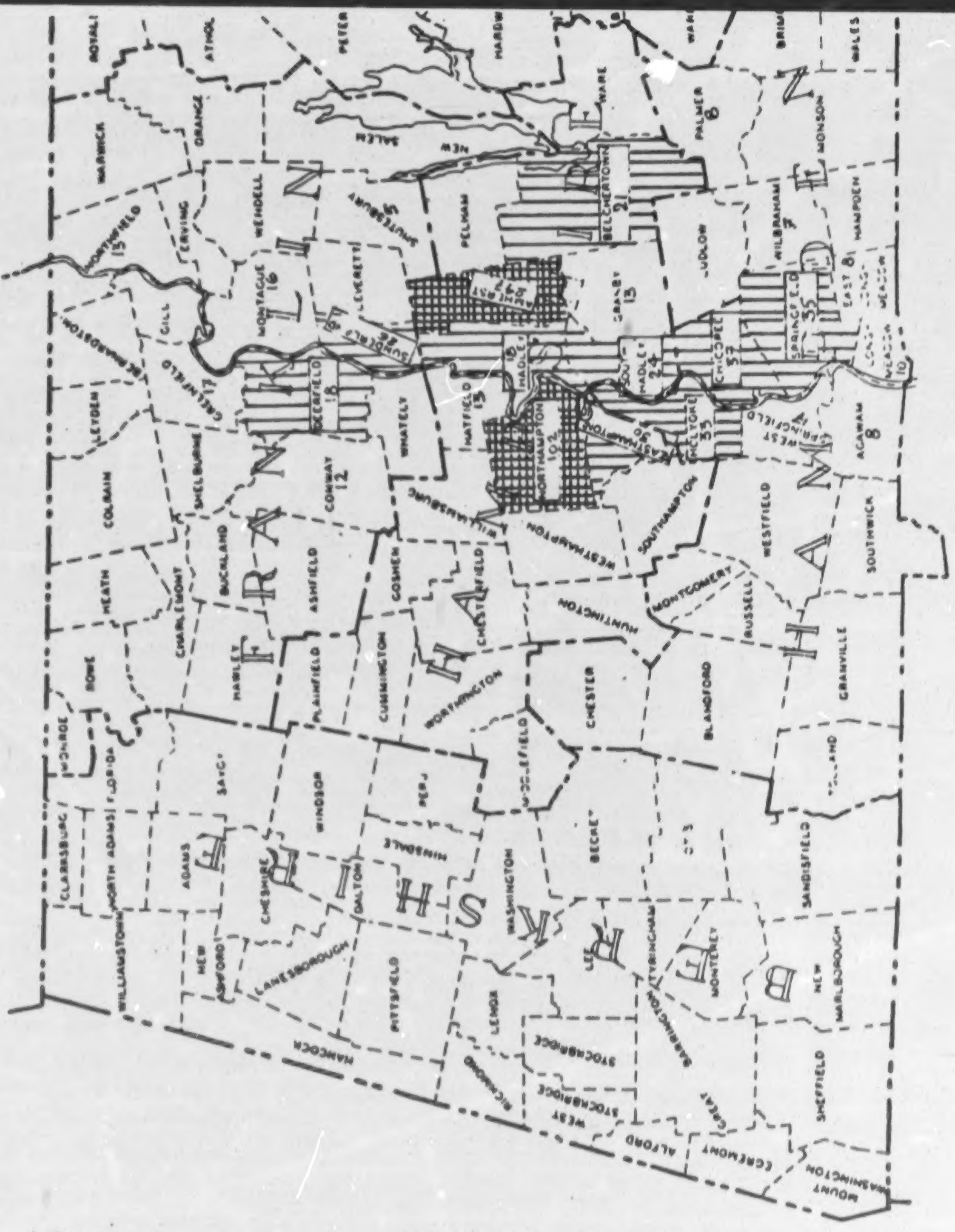
▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING PART-TIME IN REGULAR COLLEGE PROGRAM

NORTH ADAMS STATE COLLEGE

TOTAL REPORTED: 22

AMHERST/NORTHAMPTON
GEOGRAPHIC SERVICE AREA
(Western Region)


FRANKLIN
HAMPSHIRE
HAMPDEN
BERKSHIRE
NORTHFIELD 15
MONTAGUE 16
GREENFIELD 17
DEERFIELD 18
SUNDERLAND 22
SHUTESBURY 5
CONWAY 12
AMHERST 347
BELCHERTOWN 21
PALMER 8
WILBRAHAM 7
HADLEY 18
HATFIELD 13
GRANBY 13
NORTHAMPTON 102
EASTHAMPTON 50
SOUTH HADLEY 24
CHICOPEE 37
HOLYOKE 35
SPRINGFIELD 35
EAST LONGMEADOW 10
WEST SPRINGFIELD 17
AGAWAM 8
EAST 81

LEGEND

☐ 0-2%

▥ 2-8%

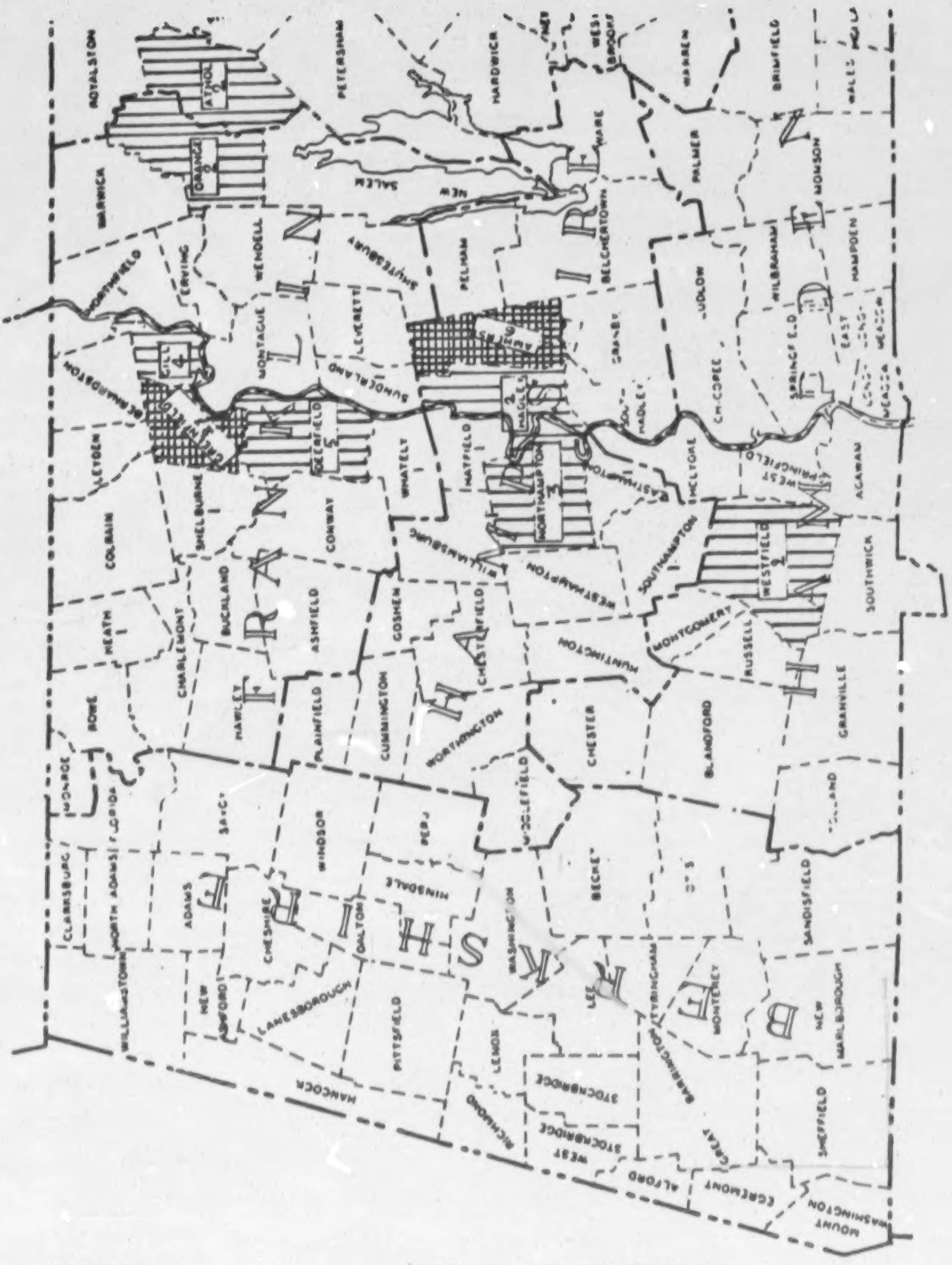
▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING CONTINUING EDUCATION.

UNIVERSITY OF MASS./AMHERST

TOTAL REPORTED: 847

NOTE: TOWNS WITH LESS THAN FOUR STUDENTS ARE OMITTED.


FRANKLIN
HAMPSHIRE
HAMPDEN
BERKSHIRE
ROYALSTON
ATHOL
WARWICK
ORANGE
PETERSHAM
HARDWICK
NEW SALEM
WARE
WEST BROOKFIELD
WARREN
BRIMFIELD
WALES
PALMER
MONSON
NORTHFIELD
ERVING
WENDELL
SHUTESBURY
PELHAM
BELCHERTOWN
LUDLOW
WILBRAHAM
HAMPDEN
MONTAGUE
LEVERETT
AMHERST
GRANBY
CHICOPEE
SPRINGFIELD
EAST LONGMEADOW
LONGMEADOW
GILL
BERNARDSTON
SUNDERLAND
DEERFIELD
SOUTH HADLEY
HADLEY
LEYDEN
GREENFIELD
SHELBURNE
WHATELY
HATFIELD
NORTHAMPTON
EASTHAMPTON
HOLYOKE
WEST SPRINGFIELD
AGAWAM
COLRAIN
CONWAY
WILLIAMSBURG
WESTHAMPTON
SOUTHAMPTON
WESTFIELD
SOUTHWICK
HEATH
CHARLEMONT
BUCKLAND
ASHFIELD
GOSHEN
CHESTERFIELD
HUNTINGTON
MONTGOMERY
RUSSELL
ROWE
HAWLEY
PLAINFIELD
CUMMINGTON
WORTHINGTON
CHESTER
BLANDFORD
GRANVILLE
MONROE
FLORIDA
SAVOY
WINDSOR
PERU
MIDDLEFIELD
BECKET
OTIS
TOLLAND
CLARKSBURG
NORTH ADAMS
ADAMS
CHESHIRE
HINSDALE
WASHINGTON
SANDISFIELD
WILLIAMSTOWN
NEW ASHFORD
LANESBOROUGH
DALTON
PITTSFIELD
LENOX
LEE
TYRINGHAM
MONTEREY
NEW MARLBOROUGH
HANCOCK
RICHMOND
STOCKBRIDGE
WEST STOCKBRIDGE
GREAT BARRINGTON
SHEFFIELD
ALFORD
EGREMONT
MOUNT WASHINGTON

LEGEND

☐ 0-2%

▥ 2-8%

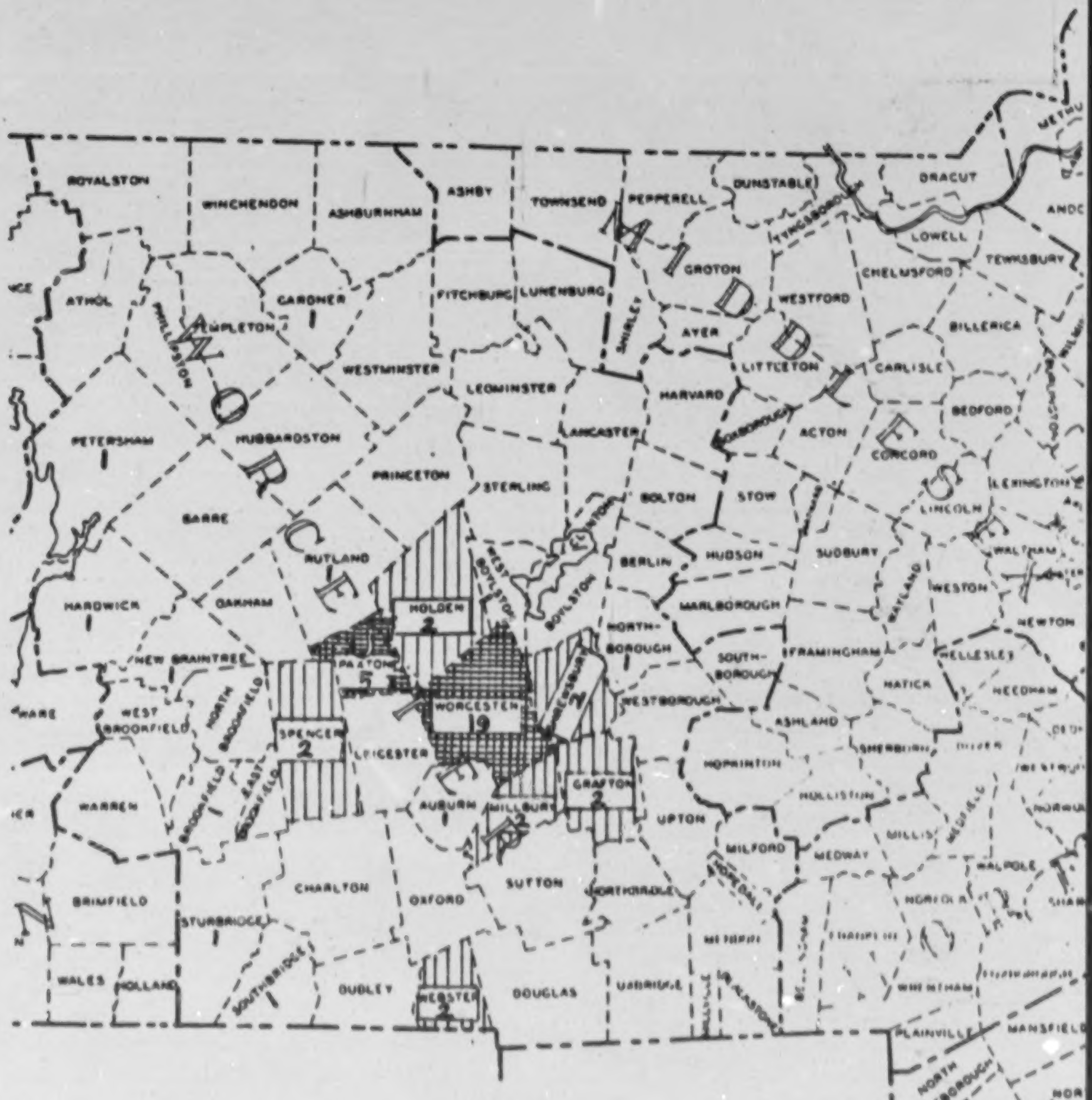
▦ ABOVE 8%

RESIDENCE OF STUDENTS
ATTENDING PART-TIME IN
REGULAR COLLEGE PROGRAM

GREENFIELD COMMUNITY COLLEGE

TOTAL REPORTED: 68

WORCESTER
GEOGRAPHIC SERVICE AREA
(Central Region)


WORCESTER
MIDDLESEX
ROYALSTON
WINCHENDON
ASHBURNHAM
ASHBY
TOWNSEND
PEPPERELL
DUNSTABLE
TYNGSBOROUGH
DRACUT
LOWELL
TEWKSBURY
ATHOL
TEMPLETON
GARDNER 1
FITCHBURG
LUNENBURG
SHIRLEY
GROTON
WESTFORD
CHELMSFORD
BILLERICA
AYER
LITTLETON
CARLISLE
BEDFORD
WESTMINSTER
LEOMINSTER
HARVARD
BOXBOROUGH
ACTON
CONCORD
PETERSHAM 1
HUBBARDSTON
LANCASTER
PRINCETON
STERLING
BOLTON
STOW
LEXINGTON
LINCOLN
BARRE
RUTLAND
WEST BOYLSTON
BOYLSTON
CLINTON
BERLIN
HUDSON
SUDBURY
WALTHAM
HARDWICK 1
OAKHAM
HOLDEN 2
MARLBOROUGH
WAYLAND
WESTON
NEWTON
NEW BRAINTREE
PAXTON 5
NORTHBOROUGH 1
SOUTHBOROUGH
FRAMINGHAM
WELLESLEY
NATICK
NEEDHAM
WEST BROOKFIELD
NORTH BROOKFIELD
SPENCER 2
LEICESTER
WORCESTER 19
SHREWSBURY 2
WESTBOROUGH
ASHLAND
SHERBORN
HOPKINTON
DOVER
WARREN
BROOKFIELD
EAST BROOKFIELD
AUBURN 1
MILLBURY 2
GRAFTON 2
UPTON
HOLLISTON
MILLIS
MEDFIELD
BRIMFIELD
STURBRIDGE 1
CHARLTON
OXFORD
SUTTON
NORTHBRIDGE
MILFORD
MEDWAY
HOPEDALE
WALPOLE
NORFOLK
SOUTHBRIDGE 1
DUDLEY
WEBSTER 2
DOUGLAS
UXBRIDGE
MENDON
BLACKSTONE
BELLINGHAM
FRANKLIN
WRENTHAM
WALES
HOLLAND
PLAINVILLE
MANSFIELD
NORTH ATTLEBOROUGH
ATTLEBORO
REHOBOTH
SEEKONK
SWANSEA

LEGEND

☐ 0-2%

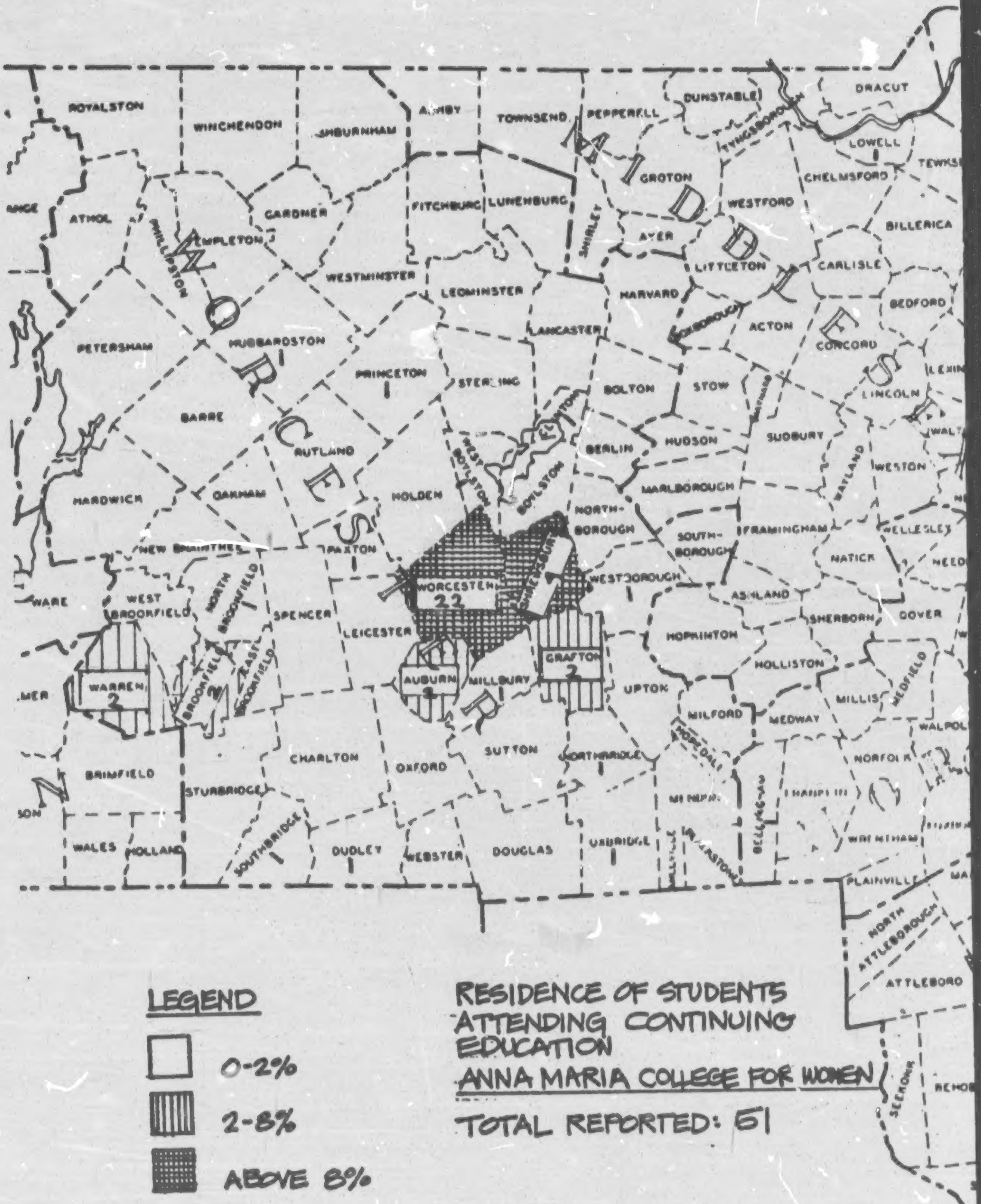
▥ 2-8%

▦ ABOVE 8%

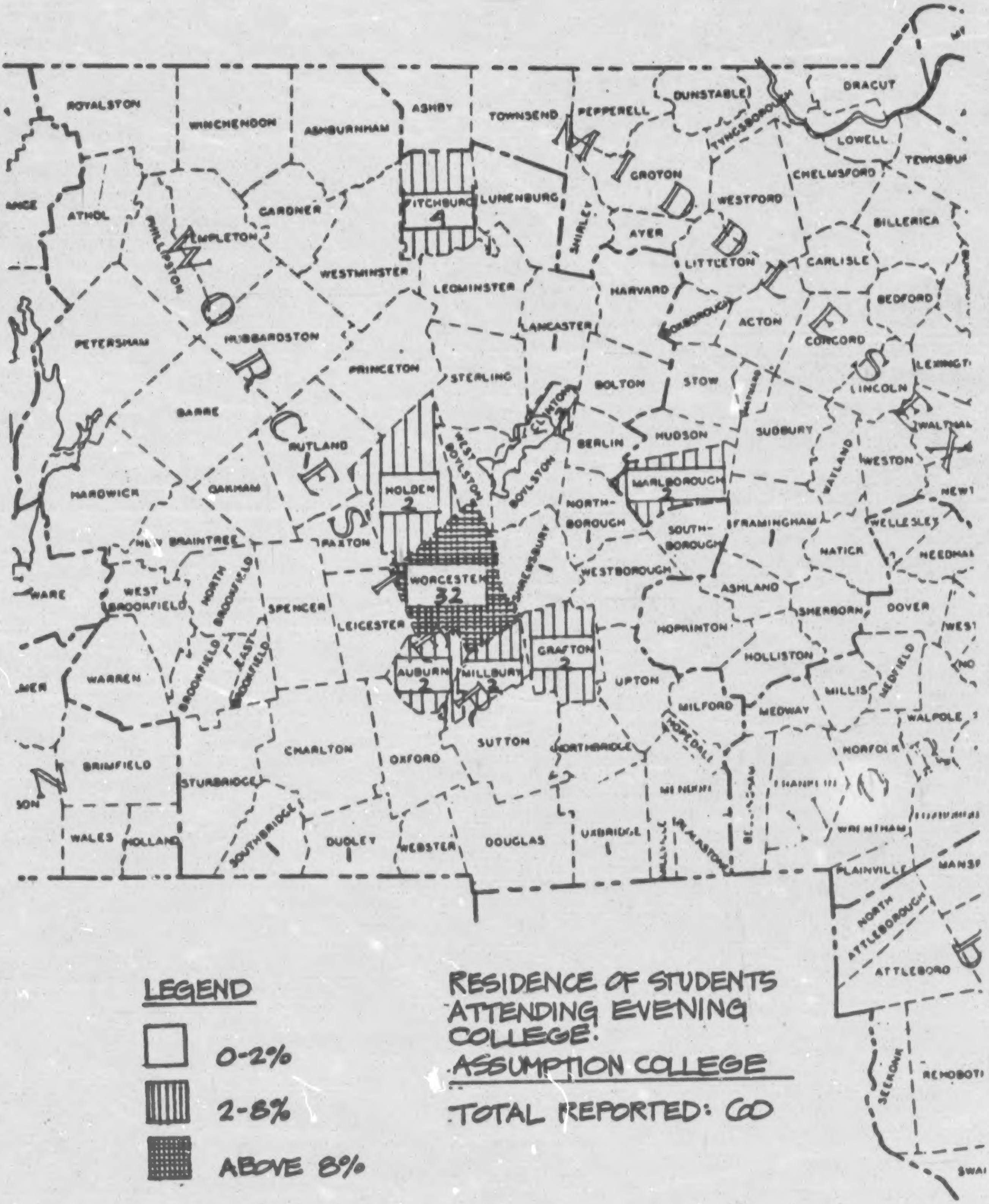
RESIDENCE OF STUDENTS ATTENDING PART-TIME IN REGULAR COLLEGE PROGRAM.

ANNA MARIA COLLEGE FOR WOMEN

TOTAL REPORTED: 47

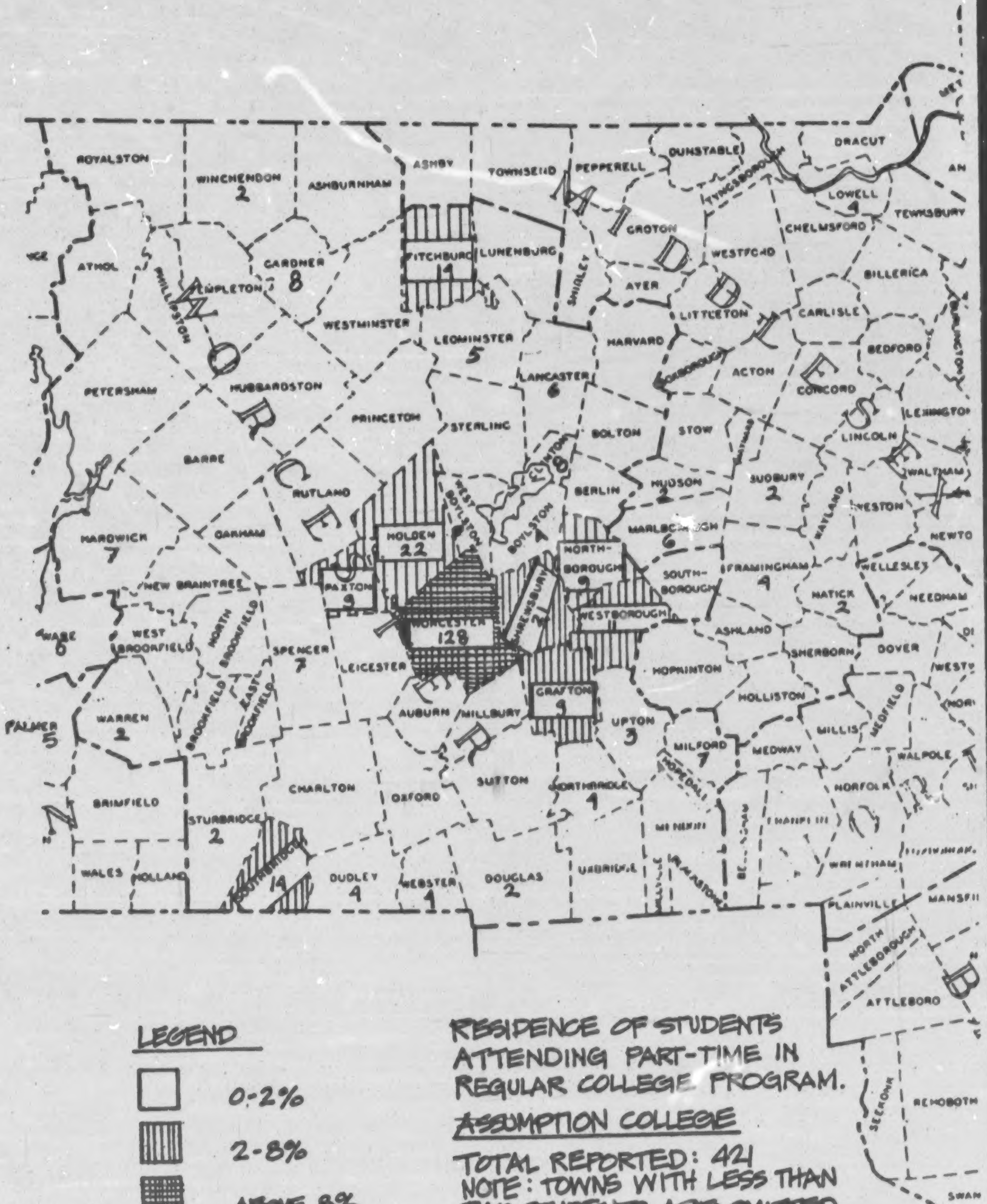

WORCESTER
MIDDLESEX
ROYALSTON
WINCHENDON
ASHBURNHAM
ASHBY
TOWNSEND
PEPPERELL
DUNSTABLE
TYNGSBOROUGH
DRACUT
LOWELL
TEWKSBURY
ATHOL
PHILLIPSTON
TEMPLETON
GARDNER
FITCHBURG
LUNENBURG
SHIRLEY
GROTON
WESTFORD
CHELMSFORD
BILLERICA
AYER
LITTLETON
CARLISLE
BEDFORD
WESTMINSTER
LEOMINSTER
HARVARD
BOXBOROUGH
ACTON
CONCORD
PETERSHAM
HUBBARDSTON
1
LANCASTER
PRINCETON
1
STERLING
BOLTON
STOW
MAYNARD
LINCOLN
BARRE
RUTLAND
WEST BOYLSTON
BOYLSTON
CLINTON
BERLIN
HUDSON
SUDBURY
WAYLAND
WESTON
HARDWICK
OAKHAM
HOLDEN
NORTHBOROUGH
MARLBOROUGH
SOUTHBOROUGH
FRAMINGHAM
NATICK
WELLESLEY
NEW BRAINTREE
PAXTON
WORCESTER
22
SHREWSBURY
WESTBOROUGH
ASHLAND
SHERBORN
DOVER
WARE
WEST BROOKFIELD
NORTH BROOKFIELD
SPENCER
LEICESTER
HOPKINTON
HOLLISTON
WARREN
2
BROOKFIELD
2
EAST BROOKFIELD
AUBURN
3
MILLBURY
GRAFTON
2
UPTON
MILFORD
MEDWAY
MILLIS
MEDFIELD
BRIMFIELD
STURBRIDGE
CHARLTON
OXFORD
SUTTON
NORTHBRIDGE
1
HOPEDALE
MENDON
BELLINGHAM
FRANKLIN
NORFOLK
WALPOLE
WALES
HOLLAND
SOUTHBRIDGE
1
DUDLEY
1
WEBSTER
DOUGLAS
UXBRIDGE
1
MILLVILLE
BLACKSTONE
WRENTHAM
PLAINVILLE
NORTH ATTLEBOROUGH
ATTLEBORO
SEEKONK
REHOBOTH
LEGEND
0-2%
2-8%
ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING CONTINUING EDUCATION
ANNA MARIA COLLEGE FOR WOMEN
TOTAL REPORTED: 51


LEGEND
☐ 0-2%
▥ 2-8%
▦ ABOVE 8%
WORCESTER
MIDDLESEX
NORFOLK
ROYALSTON
WINCHENDON
ASHBURNHAM
ASHBY
TOWNSEND
PEPPERELL
DUNSTABLE
TYNGSBOROUGH
DRACUT
LOWELL
ATHOL
TEMPLETON
PHILLIPSTON
GARDNER
FITCHBURG 4
LUNENBURG
SHIRLEY
GROTON
WESTFORD
CHELMSFORD
BILLERICA
AYER
LITTLETON
CARLISLE
WESTMINSTER
LEOMINSTER
HARVARD
BOXBOROUGH
ACTON
BEDFORD
CONCORD
PETERSHAM
HUBBARDSTON
LANCASTER 1
PRINCETON
STERLING
BOLTON
STOW
MAYNARD
LINCOLN
BARRE
CLINTON
HUDSON
SUDBURY
RUTLAND
WEST BOYLSTON
BERLIN
WAYLAND
WESTON
HARDWICK
OAKHAM
HOLDEN 2
BOYLSTON
MARLBOROUGH 3
NORTHBOROUGH
SOUTHBOROUGH
FRAMINGHAM 1
WELLESLEY
NATICK
NEW BRAINTREE
PAXTON
WORCESTER 32
SHREWSBURY
WESTBOROUGH
ASHLAND
SHERBORN
DOVER
WARE
WEST BROOKFIELD
NORTH BROOKFIELD
SPENCER
LEICESTER
HOPKINTON
HOLLISTON
BROOKFIELD
EAST BROOKFIELD
AUBURN 2
MILLBURY 3
GRAFTON 2
UPTON
MILFORD
MEDWAY
MILLIS
MEDFIELD
WARREN
WALPOLE
HOPEDALE
CHARLTON
OXFORD
SUTTON
NORTHBRIDGE
NORFOLK
BRIMFIELD
STURBRIDGE
MENDON
BELLINGHAM
FRANKLIN
WRENTHAM
SOUTHBRIDGE 1
DUDLEY 1
WEBSTER
DOUGLAS
UXBRIDGE 1
BLACKSTONE
MILLVILLE
WALES
HOLLAND
PLAINVILLE
NORTH ATTLEBOROUGH
ATTLEBORO
SEEKONK
REHOBOTH

RESIDENCE OF STUDENTS ATTENDING EVENING COLLEGE:
ASSUMPTION COLLEGE

TOTAL REPORTED: 60



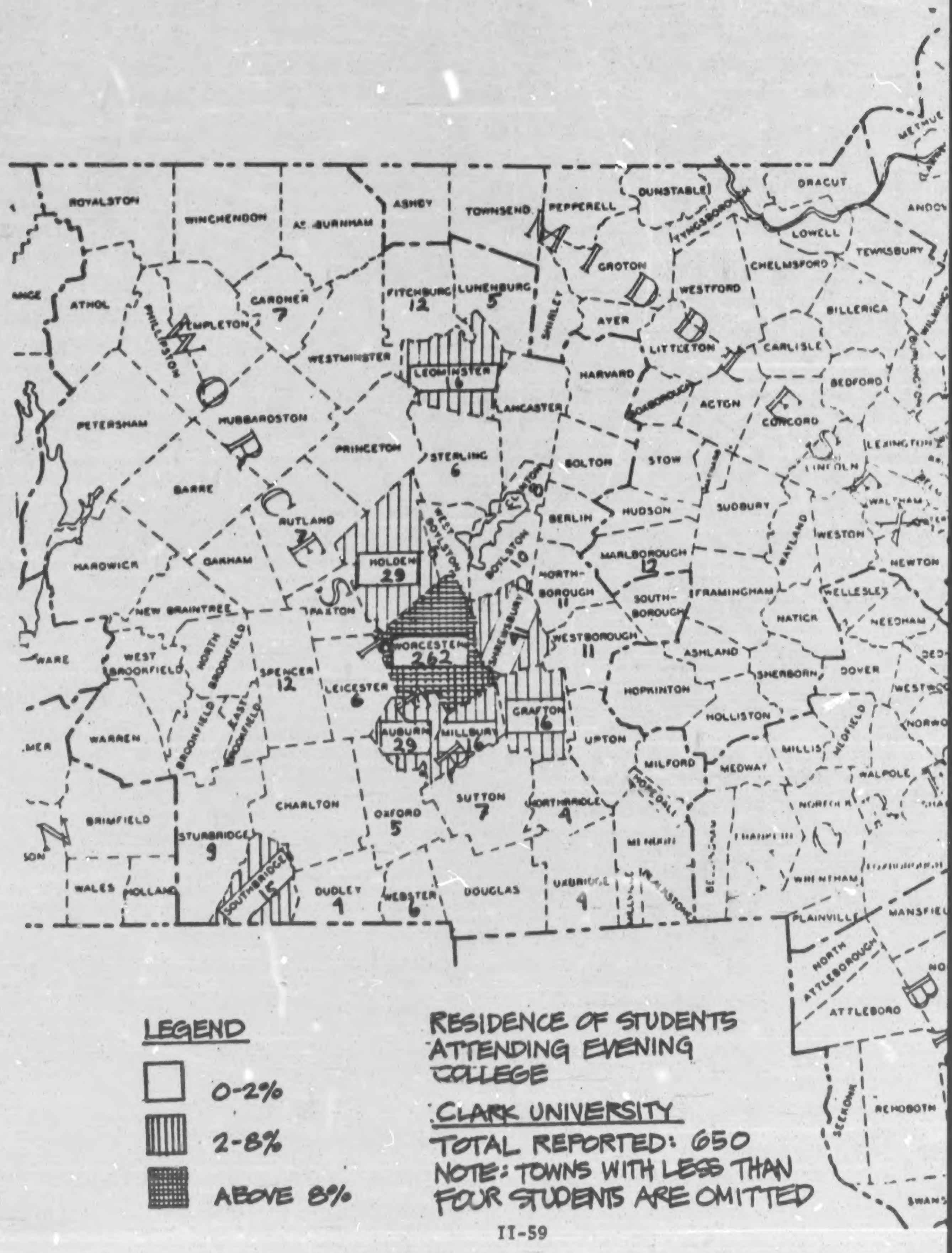
WORCESTER
MIDDLESEX
ROYALSTON
WINCHENDON 2
ASHBURNHAM
ASHBY
TOWNSEND
PEPPERELL
DUNSTABLE
TYNGSBOROUGH
DRACUT
LOWELL 4
TEWKSBURY
ATHOL
GARDNER 8
TEMPLETON
PHILLIPSTON
FITCHBURG 14
LUNENBURG
SHIRLEY
GROTON
WESTFORD
CHELMSFORD
BILLERICA
AYER
LITTLETON
CARLISLE
WESTMINSTER
LEOMINSTER 5
HARVARD
BOXBOROUGH
ACTON
BEDFORD
PETERSHAM
HUBBARDSTON
LANCASTER 6
CONCORD
PRINCETON
STERLING
BOLTON
STOW
LINCOLN
LEXINGTON
BARRE
CLINTON 8
MAYNARD
RUTLAND
WEST BOYLSTON
BERLIN
HUDSON 2
SUDBURY 2
WALTHAM
HARDWICK 7
OAKHAM
HOLDEN 22
BOYLSTON
MARLBOROUGH 6
WAYLAND
WESTON
NEWTON
NEW BRAINTREE
PAXTON 9
NORTHBOROUGH 9
SOUTHBOROUGH
FRAMINGHAM 4
WELLESLEY
NATICK 2
NEEDHAM
WARE 6
WEST BROOKFIELD
NORTH BROOKFIELD
SPENCER 7
LEICESTER
WORCESTER 128
SHREWSBURY 21
WESTBOROUGH 11
ASHLAND
SHERBORN
DOVER
HOPKINTON
HOLLISTON
BROOKFIELD
EAST BROOKFIELD
PALMER 5
WARREN 2
AUBURN
MILLBURY
GRAFTON 9
UPTON 3
MILFORD 7
MEDWAY
MILLIS
MEDFIELD
WALPOLE
CHARLTON
OXFORD
SUTTON
NORTHBRIDGE 4
HOPEDALE
MENDON
BELLINGHAM
FRANKLIN
NORFOLK
BRIMFIELD
STURBRIDGE 2
WALES
HOLLAND
SOUTHBRIDGE 14
DUDLEY 4
WEBSTER 1
DOUGLAS 2
UXBRIDGE
MILLVILLE
BLACKSTONE
WRENTHAM
PLAINVILLE
MANSFIELD
NORTH ATTLEBOROUGH
ATTLEBORO
SEEKONK
REHOBOTH
SWANSEA
LEGEND
☐ 0-2%
▥ 2-8%
▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING PART-TIME IN REGULAR COLLEGE PROGRAM.

ASSUMPTION COLLEGE

TOTAL REPORTED: 421

NOTE: TOWNS WITH LESS THAN TWO STUDENTS ARE OMITTED.


ROYALSTON
WINCHENDON
ASHBURNHAM
ASHBY
TOWNSEND
PEPPERELL
DUNSTABLE
TYNGSBOROUGH
DRACUT
METHUEN
LOWELL
TEWKSBURY
MIDDLESEX
ATHOL
TEMPLETON
PHILLIPSTON
GARDNER
7
FITCHBURG
12
LUNENBURG
5
SHIRLEY
GROTON
WESTFORD
CHELMSFORD
BILLERICA
AYER
LITTLETON
CARLISLE
BEDFORD
WESTMINSTER
LEOMINSTER
6
HARVARD
BOXBOROUGH
ACTON
CONCORD
LANCASTER
PETERSHAM
HUBBARDSTON
WORCESTER
PRINCETON
STERLING
6
BOLTON
STOW
LINCOLN
LEXINGTON
BARRE
CLINTON
BERLIN
HUDSON
SUDBURY
WALTHAM
RUTLAND
7
WEST BOYLSTON
BOYLSTON
10
MARLBOROUGH
12
WAYLAND
WESTON
HARDWICK
OAKHAM
HOLDEN
29
NORTHBOROUGH
11
SOUTHBOROUGH
FRAMINGHAM
WELLESLEY
NEWTON
NEW BRAINTREE
PAXTON
NATICK
NEEDHAM
WARE
WEST BROOKFIELD
NORTH BROOKFIELD
SPENCER
12
LEICESTER
6
WORCESTER
262
SHREWSBURY
WESTBOROUGH
11
ASHLAND
HOPKINTON
SHERBORN
DOVER
GRAFTON
16
HOLLISTON
AUBURN
29
MILLBURY
16
UPTON
WARREN
BROOKFIELD
EAST BROOKFIELD
MILLIS
MEDFIELD
MILFORD
MEDWAY
WALPOLE
BRIMFIELD
CHARLTON
OXFORD
5
SUTTON
7
NORTHBRIDGE
4
HOPEDALE
NORFOLK
STURBRIDGE
9
MENDON
FRANKLIN
WRENTHAM
WALES
HOLLAND
SOUTHBRIDGE
15
DUDLEY
4
WEBSTER
6
DOUGLAS
UXBRIDGE
4
MILLVILLE
BLACKSTONE
BELLINGHAM
PLAINVILLE
MANSFIELD
NORTH ATTLEBOROUGH
ATTLEBORO
SEEKONK
REHOBOTH

LEGEND

☐ 0-2%

▥ 2-8%

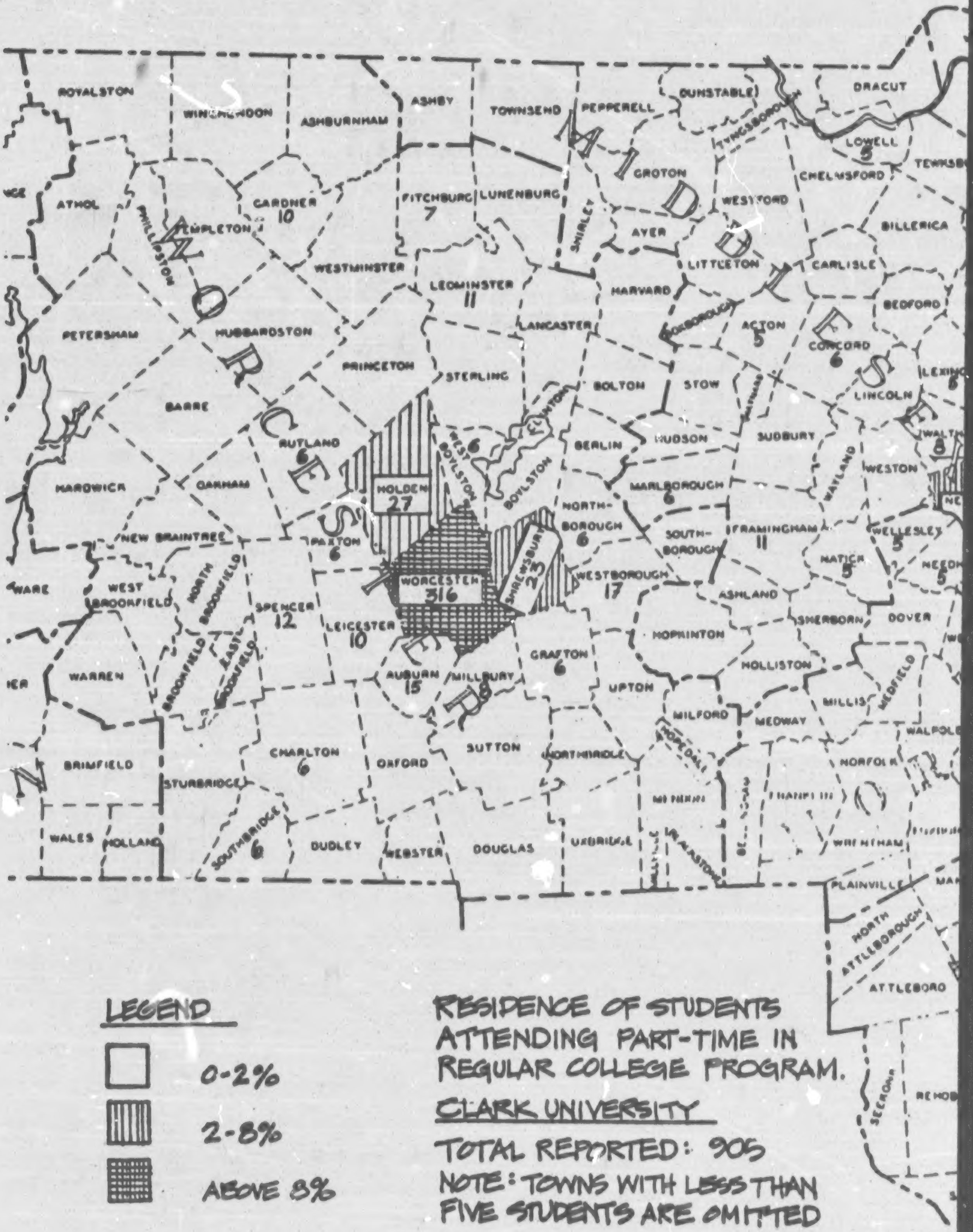
▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING EVENING COLLEGE

CLARK UNIVERSITY

TOTAL REPORTED: 650

NOTE: TOWNS WITH LESS THAN FOUR STUDENTS ARE OMITTED

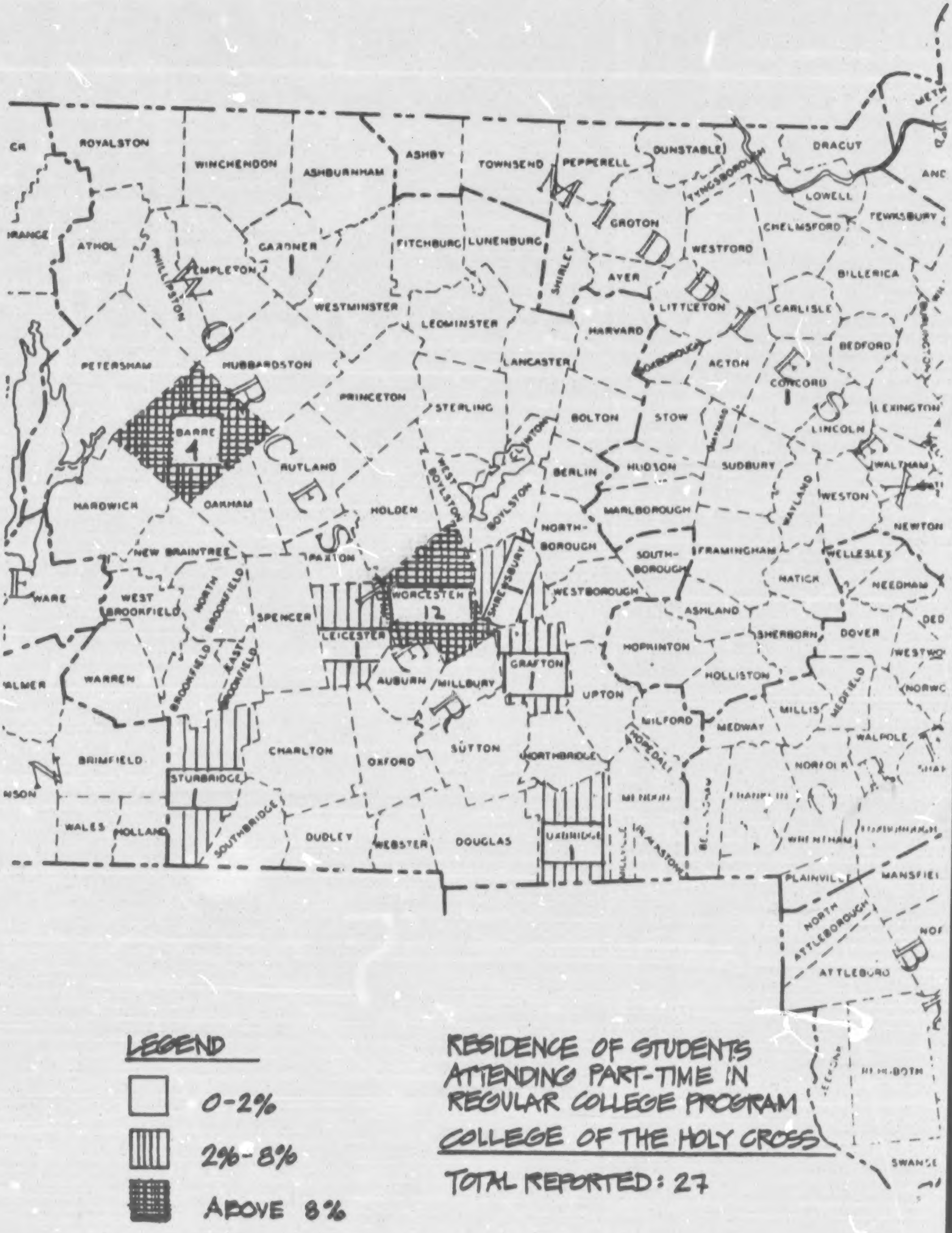

WORCESTER
MIDDLESEX
ROYALSTON
WINCHENDON
ASHBURNHAM
ASHBY
TOWNSEND
PEPPERELL
DUNSTABLE
TYNGSBOROUGH
DRACUT
LOWELL 5
ATHOL
TEMPLETON
PHILLIPSTON
GARDNER 10
FITCHBURG 7
LUNENBURG
SHIRLEY
GROTON
WESTFORD
CHELMSFORD
BILLERICA
AYER
LITTLETON
CARLISLE
BEDFORD
WESTMINSTER
LEOMINSTER 11
HARVARD
BOXBOROUGH
ACTON 5
CONCORD 6
PETERSHAM
HUBBARDSTON
PRINCETON
STERLING
LANCASTER
BOLTON
STOW
MAYNARD
LINCOLN
BARRE
RUTLAND 6
WEST BOYLSTON 6
CLINTON
BERLIN
HUDSON
SUDBURY
WAYLAND
WESTON
HARDWICK
OAKHAM
HOLDEN 27
BOYLSTON
MARLBOROUGH 6
NORTHBOROUGH 6
SOUTHBOROUGH
FRAMINGHAM 11
NATICK 5
WELLESLEY 5
NEW BRAINTREE
PAXTON 6
WORCESTER 316
SHREWSBURY 23
WESTBOROUGH 17
ASHLAND
WARE
WEST BROOKFIELD
NORTH BROOKFIELD
SPENCER 12
LEICESTER 10
HOPKINTON
SHERBORN
DOVER
WARREN
BROOKFIELD
EAST BROOKFIELD
AUBURN 15
MILLBURY 8
GRAFTON 6
UPTON
HOLLISTON
MILLIS
MEDFIELD
MILFORD
MEDWAY
BRIMFIELD
STURBRIDGE
CHARLTON 6
OXFORD
SUTTON
NORTHBRIDGE
HOPEDALE
NORFOLK
WALPOLE
WALES
HOLLAND
SOUTHBRIDGE 6
DUDLEY
WEBSTER
DOUGLAS
UXBRIDGE
MILLVILLE
BLACKSTONE
MENDON
BELLINGHAM
FRANKLIN
WRENTHAM
PLAINVILLE
NORTH ATTLEBOROUGH
ATTLEBORO
SEEKONK
REHOBOTH
LEGEND
☐ 0-2%
▥ 2-8%
▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING PART-TIME IN REGULAR COLLEGE PROGRAM.

CLARK UNIVERSITY

TOTAL REPORTED: 905

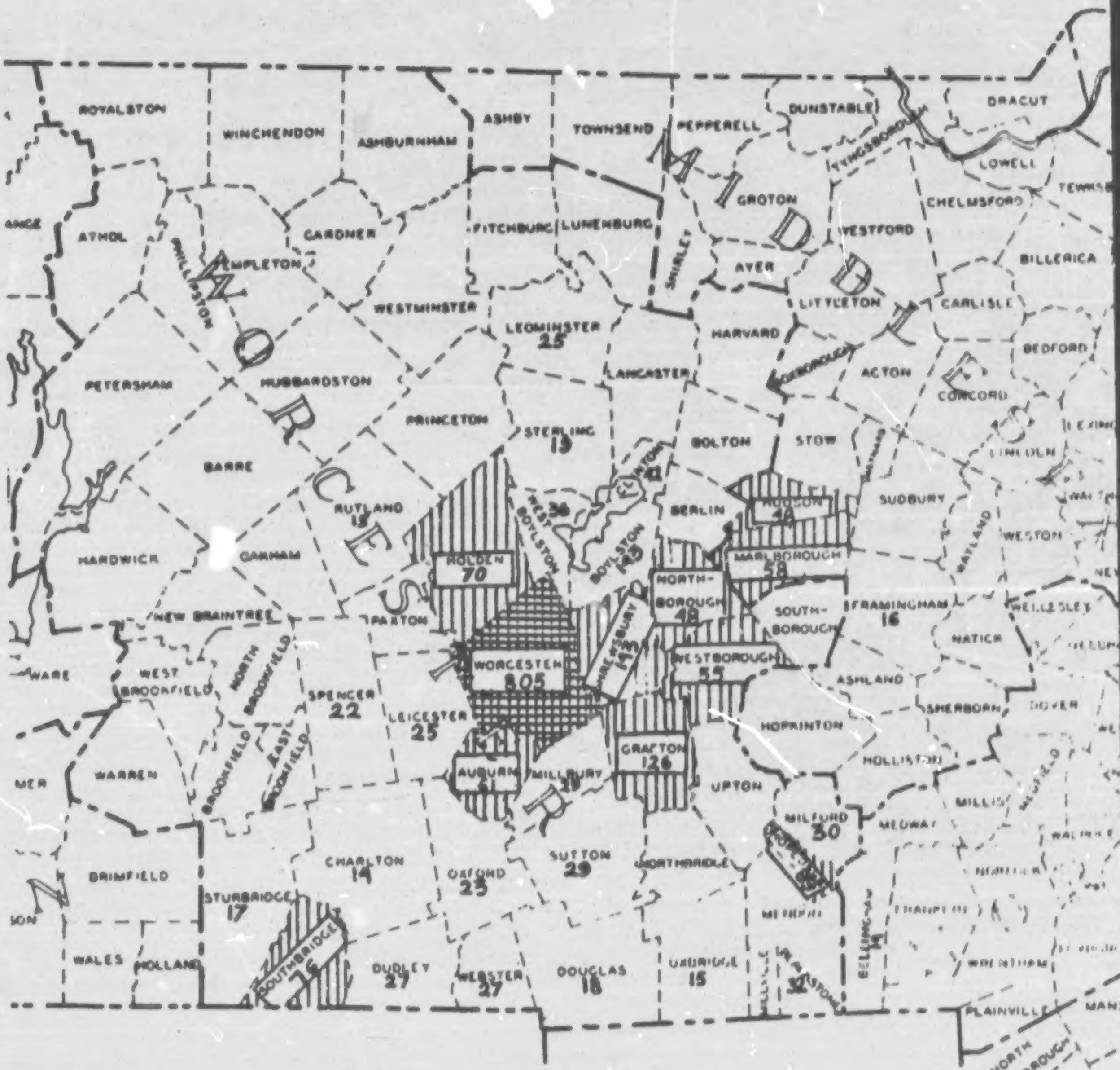
NOTE: TOWNS WITH LESS THAN FIVE STUDENTS ARE OMITTED


LEGEND
☐ 0-2%
▥ 2%-8%
▦ ABOVE 8%
WORCESTER
MIDDLESEX
NORFOLK
BARRE 4
WORCESTER 12
GARDNER 1
GRAFTON 1
STURBRIDGE 1
UXBRIDGE 1
LEICESTER 1
SHREWSBURY 1
CONCORD 1
ROYALSTON
WINCHENDON
ASHBURNHAM
ASHBY
TOWNSEND
PEPPERELL
DUNSTABLE
TYNGSBOROUGH
DRACUT
LOWELL
TEWKSBURY
CHELMSFORD
ATHOL
TEMPLETON
PHILLIPSTON
FITCHBURG
LUNENBURG
SHIRLEY
GROTON
WESTFORD
AYER
BILLERICA
CARLISLE
LITTLETON
HARVARD
WESTMINSTER
LEOMINSTER
LANCASTER
BOXBOROUGH
ACTON
BEDFORD
PETERSHAM
HUBBARDSTON
PRINCETON
STERLING
BOLTON
STOW
LEXINGTON
LINCOLN
MAYNARD
SUDBURY
HUDSON
BERLIN
CLINTON
RUTLAND
HARDWICK
OAKHAM
HOLDEN
WEST BOYLSTON
BOYLSTON
MARLBOROUGH
NORTHBOROUGH
SOUTHBOROUGH
FRAMINGHAM
WAYLAND
WESTON
WALTHAM
NEWTON
WELLESLEY
NATICK
NEEDHAM
NEW BRAINTREE
PAXTON
WARE
WEST BROOKFIELD
NORTH BROOKFIELD
SPENCER
WESTBOROUGH
ASHLAND
HOPKINTON
SHERBORN
DOVER
WARREN
BROOKFIELD
EAST BROOKFIELD
AUBURN
MILLBURY
UPTON
HOLLISTON
MILLIS
MEDFIELD
MILFORD
MEDWAY
HOPEDALE
WALPOLE
BRIMFIELD
CHARLTON
OXFORD
SUTTON
NORTHBRIDGE
MENDON
NORFOLK
WRENTHAM
WALES
HOLLAND
SOUTHBRIDGE
DUDLEY
WEBSTER
DOUGLAS
MILLVILLE
BLACKSTONE
BELLINGHAM
FRANKLIN
PLAINVILLE
MANSFIELD
NORTH ATTLEBOROUGH
ATTLEBORO
REHOBOTH
SEEKONK
SWANSEA
PALMER
MONSON

RESIDENCE OF STUDENTS ATTENDING PART-TIME IN REGULAR COLLEGE PROGRAM

COLLEGE OF THE HOLY CROSS

TOTAL REPORTED: 27


WORCESTER
MIDDLESEX
ROYALSTON
WINCHENDON
ASHBURNHAM
ASHBY
TOWNSEND
PEPPERELL
DUNSTABLE
TYNGSBOROUGH
DRACUT
LOWELL
ATHOL
TEMPLETON
GARDNER
FITCHBURG
LUNENBURG
GROTON
WESTFORD
CHELMSFORD
BILLERICA
SHIRLEY
AYER
LITTLETON
CARLISLE
WESTMINSTER
LEOMINSTER
25
HARVARD
BEDFORD
PETERSHAM
HUBBARDSTON
LANCASTER
ACTON
CONCORD
PRINCETON
STERLING
13
BOLTON
STOW
BARRE
RUTLAND
WEST BOYLSTON
36
BERLIN
SUDBURY
WESTON
HARDWICK
OAKHAM
HOLDEN
70
BOYLSTON
MARLBOROUGH
58
NORTH-BOROUGH
48
SOUTH-BOROUGH
FRAMINGHAM
16
NEW BRAINTREE
PAXTON
WORCESTER
805
WESTBOROUGH
55
NATICK
WELLESLEY
WARE
WEST BROOKFIELD
NORTH BROOKFIELD
SPENCER
22
LEICESTER
25
ASHLAND
SHERBORN
DOVER
HOPKINTON
WARREN
BROOKFIELD
EAST BROOKFIELD
AUBURN
MILLBURY
GRAFTON
126
UPTON
HOLLISTON
MILFORD
30
MEDWAY
MILLIS
BRIMFIELD
STURBRIDGE
17
CHARLTON
14
OXFORD
SUTTON
29
NORTHBRIDGE
WALES
HOLLAND
SOUTHBRIDGE
16
DUDLEY
27
WEBSTER
27
DOUGLAS
18
UXBRIDGE
15
MILLVILLE
BLACKSTONE
32
BELLINGHAM
WRENTHAM
PLAINVILLE
NORTH ATTLEBOROUGH
ATTLEBORO

LEGEND

☐ 0-2%

▥ 2-8%

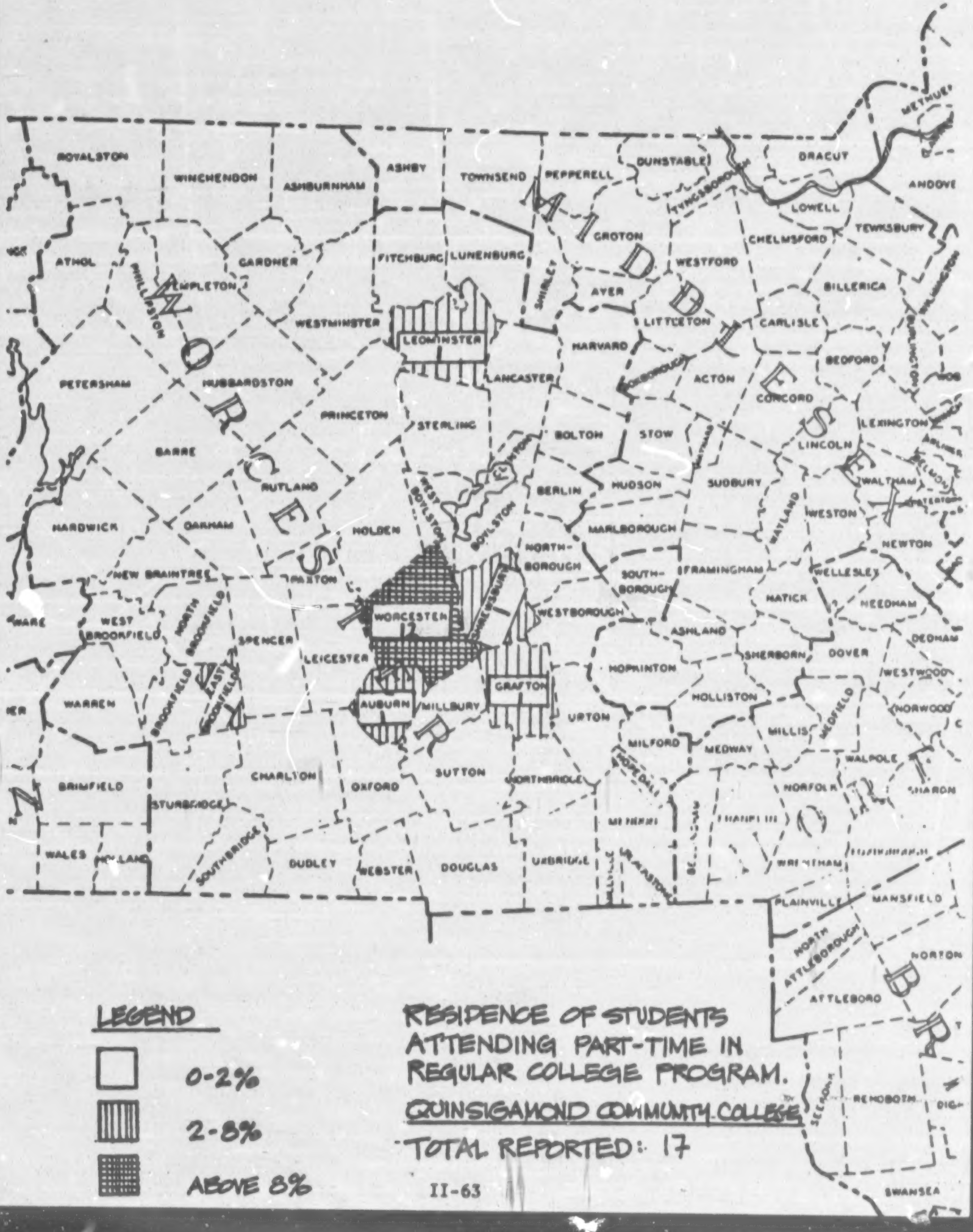
▦ ABOVE 8%

RESIDENCE OF STUDENTS
ATTENDING CONTINUING
EDUCATION AND COMM. SERVICES

QUINSIGAMOND COMMUNITY COLLEGE

TOTAL REPORTED: 2285

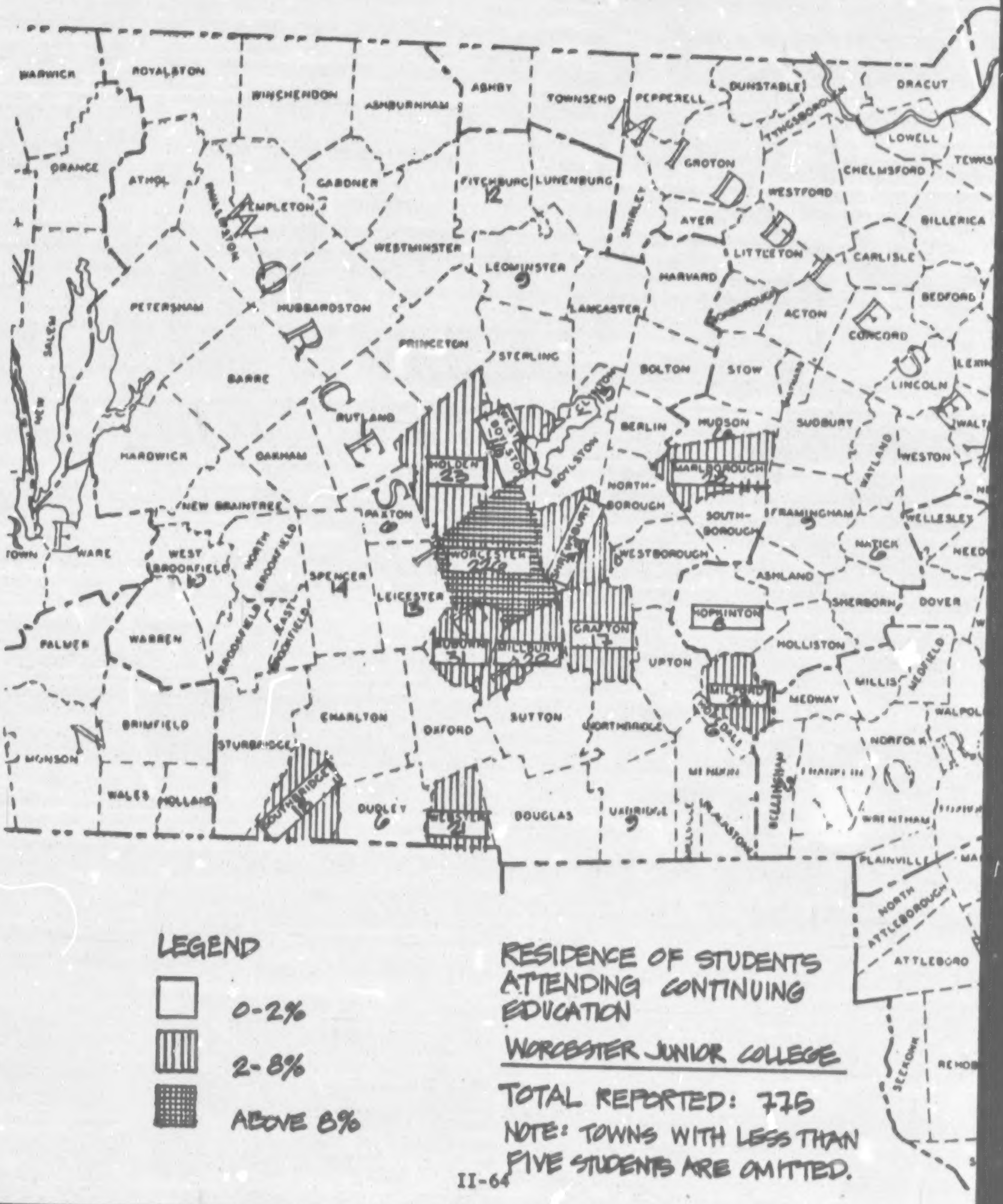
NOTE: TOWNS WITH LESS THAN NINE STUDENTS ARE OMITTED.


WORCESTER
MIDDLESEX
NORFOLK
ROYALSTON
WINCHENDON
ASHBURNHAM
ASHBY
TOWNSEND
PEPPERELL
DUNSTABLE
TYNGSBOROUGH
DRACUT
METHUEN
ANDOVER
LOWELL
TEWKSBURY
ATHOL
PHILLIPSTON
TEMPLETON
GARDNER
FITCHBURG
LUNENBURG
SHIRLEY
GROTON
WESTFORD
CHELMSFORD
BILLERICA
WILMINGTON
WESTMINSTER
LEOMINSTER
AYER
LITTLETON
CARLISLE
HARVARD
BOXBOROUGH
ACTON
BEDFORD
BURLINGTON
PETERSHAM
HUBBARDSTON
LANCASTER
CONCORD
PRINCETON
STERLING
BOLTON
STOW
MAYNARD
LINCOLN
LEXINGTON
ARLINGTON
BELMONT
BARRE
CLINTON
RUTLAND
WEST BOYLSTON
BERLIN
HUDSON
SUDBURY
WALTHAM
WATERTOWN
WESTON
HARDWICK
OAKHAM
HOLDEN
BOYLSTON
MARLBOROUGH
WAYLAND
NEWTON
NORTHBOROUGH
NEW BRAINTREE
PAXTON
SOUTHBOROUGH
FRAMINGHAM
WELLESLEY
NATICK
NEEDHAM
WARE
WEST BROOKFIELD
NORTH BROOKFIELD
SPENCER
WORCESTER
SHREWSBURY
WESTBOROUGH
ASHLAND
DEDHAM
LEICESTER
HOPKINTON
SHERBORN
DOVER
WESTWOOD
BROOKFIELD
EAST BROOKFIELD
WARREN
AUBURN
MILLBURY
GRAFTON
UPTON
HOLLISTON
MEDFIELD
NORWOOD
MILFORD
MEDWAY
MILLIS
WALPOLE
CHARLTON
OXFORD
SUTTON
NORTHBRIDGE
HOPEDALE
NORFOLK
SHARON
BRIMFIELD
STURBRIDGE
MENDON
BELLINGHAM
FRANKLIN
WRENTHAM
WALES
HOLLAND
SOUTHBRIDGE
DUDLEY
WEBSTER
DOUGLAS
UXBRIDGE
MILLVILLE
BLACKSTONE
FOXBOROUGH
PLAINVILLE
MANSFIELD
NORTH ATTLEBOROUGH
NORTON
ATTLEBORO
BRISTOL
SEEKONK
REHOBOTH
DIGHTON
SWANSEA
LEGEND
☐ 0-2%
▥ 2-8%
▦ ABOVE 8%

RESIDENCE OF STUDENTS
ATTENDING PART-TIME IN
REGULAR COLLEGE PROGRAM.

QUINSIGAMOND COMMUNITY COLLEGE

TOTAL REPORTED: 17

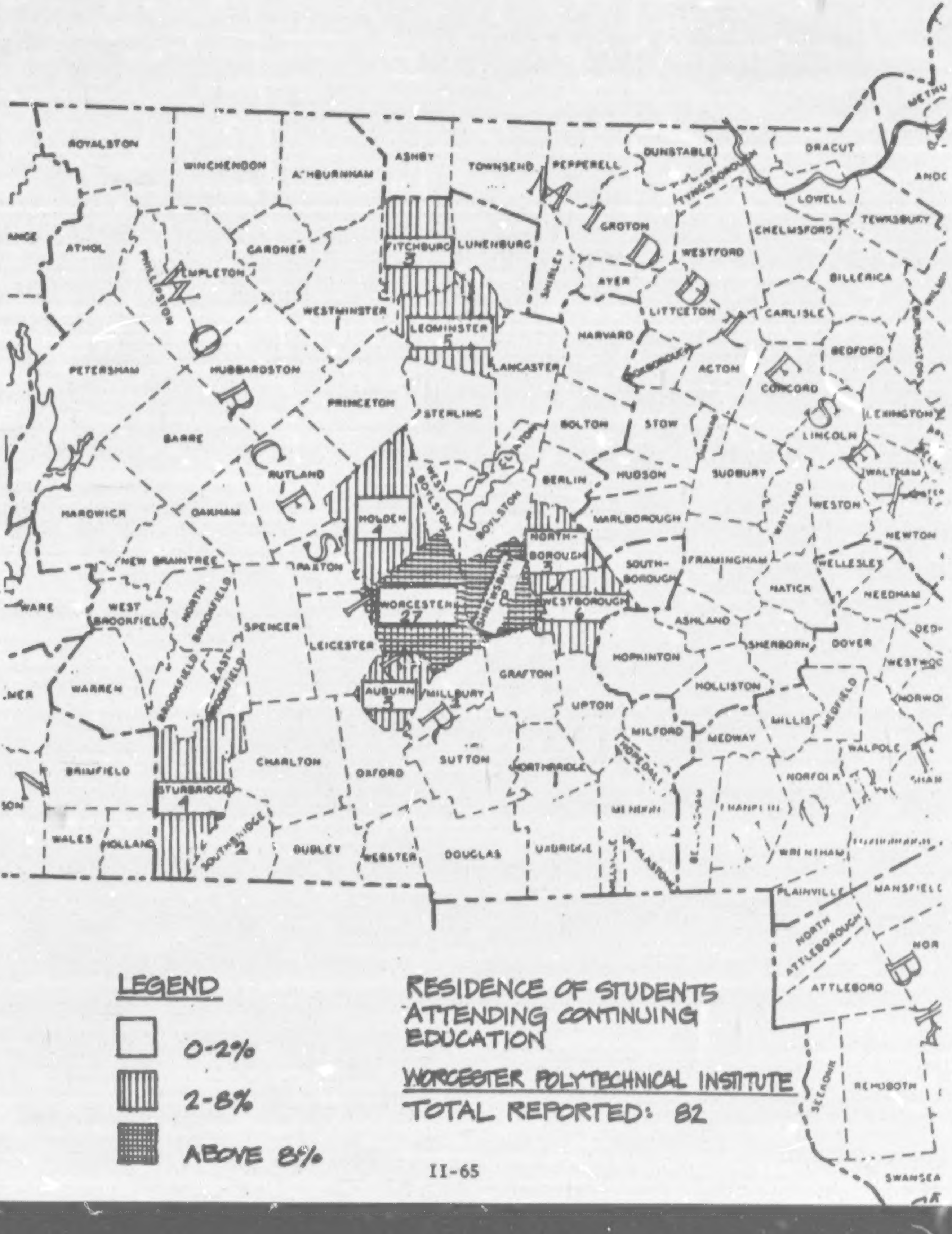

WARWICK
ROYALSTON
WINCHENDON
ASHBURNHAM
ASHBY
TOWNSEND
PEPPERELL
DUNSTABLE
DRACUT
TYNGSBOROUGH
LOWELL
ORANGE
ATHOL
TEMPLETON
GARDNER
FITCHBURG 12
LUNENBURG
GROTON
WESTFORD
CHELMSFORD
PHILLIPSTON
SHIRLEY
AYER
BILLERICA
WESTMINSTER
LEOMINSTER 9
LITTLETON
CARLISLE
HARVARD
PETERSHAM
HUBBARDSTON
LANCASTER
BOXBOROUGH
ACTON
BEDFORD
NEW SALEM
CONCORD
PRINCETON
STERLING
BARRE
BOLTON
STOW
MAYNARD
LINCOLN
CLINTON 15
RUTLAND
BERLIN
HUDSON
SUDBURY
HARDWICK
OAKHAM
HOLDEN 23
WEST BOYLSTON 10
BOYLSTON
MARLBOROUGH
WAYLAND
WESTON
NORTHBOROUGH
NEW BRAINTREE
PAXTON 6
SOUTHBOROUGH
FRAMINGHAM 5
WELLESLEY
WARE
WEST BROOKFIELD 10
NORTH BROOKFIELD
SPENCER 14
WORCESTER
SHREWSBURY
WESTBOROUGH
NATICK 6
LEICESTER 13
ASHLAND
SHERBORN
DOVER
PALMER
WARREN
BROOKFIELD
EAST BROOKFIELD
AUBURN 31
MILLBURY
GRAFTON 7
HOPKINTON 8
HOLLISTON
UPTON
MILLIS
MEDFIELD
MILFORD
MEDWAY
CHARLTON
OXFORD
SUTTON
NORTHBRIDGE
HOPEDALE
BRIMFIELD
WALPOLE
MONSON
STURBRIDGE
SOUTHBRIDGE
MENDON
BELLINGHAM
FRANKLIN
NORFOLK
WALES
HOLLAND
DUDLEY 6
WEBSTER
DOUGLAS
UXBRIDGE 9
BLACKSTONE
MILLVILLE
WRENTHAM
PLAINVILLE
NORTH ATTLEBOROUGH
ATTLEBORO
SEEKONK
REHOBOTH
WORCESTER
MIDDLESEX
NORFOLK
LEGEND
☐ 0-2%
▥ 2-8%
▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING CONTINUING EDUCATION

WORCESTER JUNIOR COLLEGE

TOTAL REPORTED: 775

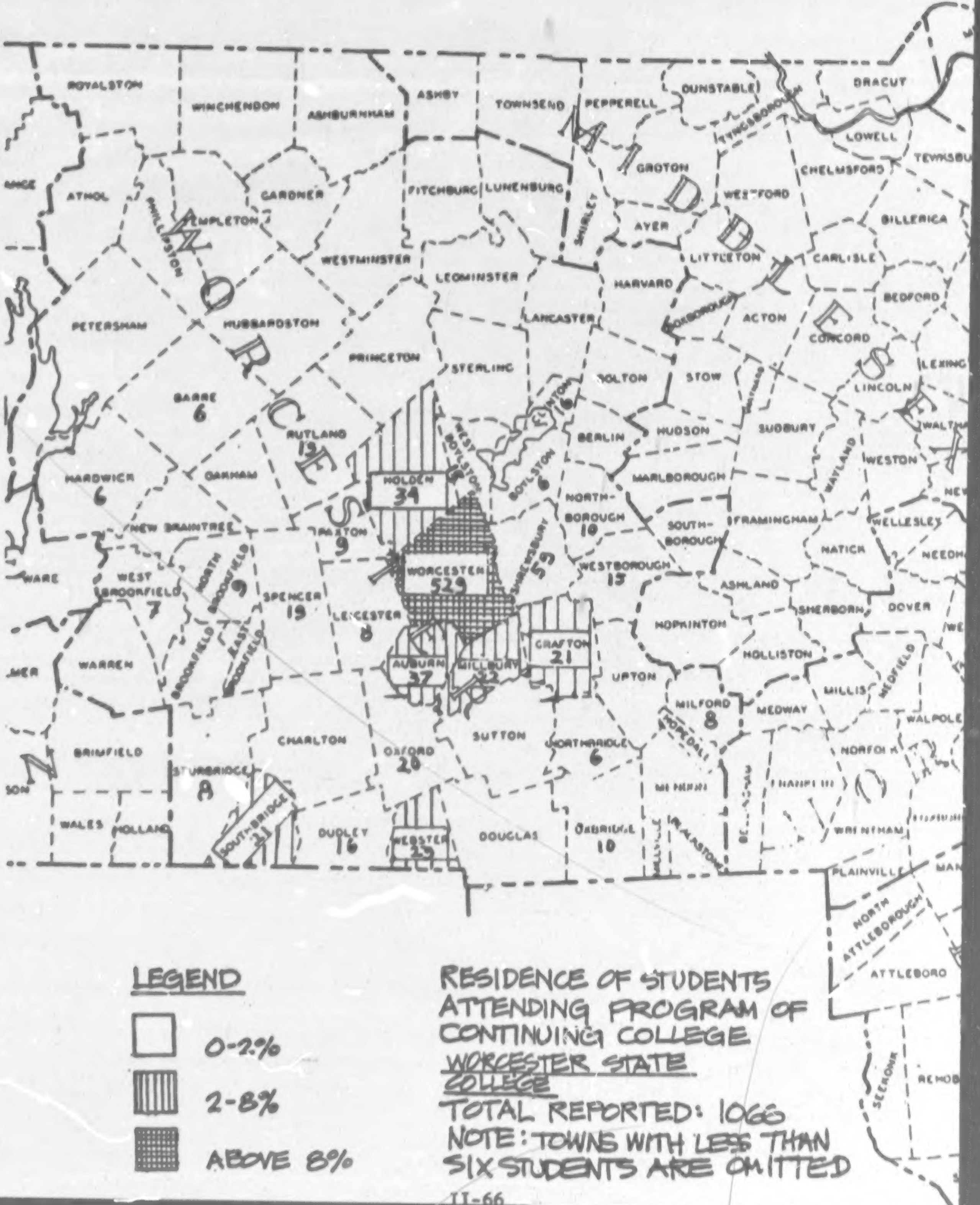
NOTE: TOWNS WITH LESS THAN FIVE STUDENTS ARE OMITTED.


WORCESTER
MIDDLESEX
NORFOLK
ROYALSTON
WINCHENDON
ASHBURNHAM
ASHBY
TOWNSEND
PEPPERELL
DUNSTABLE
TYNGSBOROUGH
DRACUT
LOWELL
TEWKSBURY
ATHOL
PHILLIPSTON
TEMPLETON
GARDNER
FITCHBURG 3
LUNENBURG
GROTON
WESTFORD
CHELMSFORD
BILLERICA
SHIRLEY
AYER
LITTLETON
CARLISLE
BEDFORD
WESTMINSTER
LEOMINSTER 5
HARVARD
BOXBOROUGH
ACTON
CONCORD
PETERSHAM
HUBBARDSTON
LANCASTER
PRINCETON
STERLING
BOLTON
STOW
LEXINGTON
LINCOLN
BARRE
RUTLAND
CLINTON
BERLIN
HUDSON
SUDBURY
WALTHAM
WAYLAND
WESTON
HARDWICK
OAKHAM
HOLDEN 4
WEST BOYLSTON
BOYLSTON
MARLBOROUGH
NEWTON
NEW BRAINTREE
PAXTON
NORTHBOROUGH 3
SOUTHBOROUGH
FRAMINGHAM
WELLESLEY
NATICK
NEEDHAM
WARE
WEST BROOKFIELD
NORTH BROOKFIELD
SPENCER
WORCESTER 27
SHREWSBURY
WESTBOROUGH 6
ASHLAND
LEICESTER
HOPKINTON
SHERBORN
DOVER
WARREN
BROOKFIELD
EAST BROOKFIELD
AUBURN 3
MILLBURY 1
GRAFTON
UPTON
HOLLISTON
MEDFIELD
MILLIS
BRIMFIELD
CHARLTON
OXFORD
SUTTON
NORTHBRIDGE
MILFORD
MEDWAY
HOPEDALE
NORFOLK
WALPOLE
STURBRIDGE 1
MENDON
FRANKLIN
WALES
HOLLAND
SOUTHBRIDGE 2
DUDLEY
WEBSTER
DOUGLAS
UXBRIDGE
BLACKSTONE
BELLINGHAM
WRENTHAM
PLAINVILLE
MANSFIELD
NORTH ATTLEBOROUGH
ATTLEBORO
SEEKONK
REHOBOTH
SWANSEA
LEGEND
0-2%
2-8%
ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING CONTINUING EDUCATION

WORCESTER POLYTECHNICAL INSTITUTE

TOTAL REPORTED: 82


WORCESTER
MIDDLESEX
NORFOLK
ROYALSTON
WINCHENDON
ASHBURNHAM
ASHBY
TOWNSEND
PEPPERELL
DUNSTABLE
TYNGSBOROUGH
DRACUT
LOWELL
TEWKSBU
ATHOL
PHILLIPSTON
TEMPLETON
GARDNER
FITCHBURG
LUNENBURG
SHIRLEY
GROTON
WESTFORD
CHELMSFORD
BILLERICA
AYER
LITTLETON
CARLISLE
WESTMINSTER
LEOMINSTER
HARVARD
BOXBOROUGH
ACTON
BEDFORD
CONCORD
PETERSHAM
HUBBARDSTON
LANCASTER
PRINCETON
STERLING
BOLTON
STOW
LINCOLN
LEXING
BARRE
6
RUTLAND
13
WEST BOYLSTON
CLINTON
16
BERLIN
HUDSON
SUDBURY
MAYNARD
WALTH
WESTON
WAYLAND
HARDWICK
6
OAKHAM
HOLDEN
34
BOYLSTON
6
NORTH-BOROUGH
10
MARLBOROUGH
NEW
WELLESLEY
NEW BRAINTREE
PAXTON
9
SOUTH-BOROUGH
FRAMINGHAM
NATICK
NEEDH
WARE
WEST BROOKFIELD
7
NORTH BROOKFIELD
9
SPENCER
19
WORCESTER
529
SHREWSBURY
59
WESTBOROUGH
13
ASHLAND
SHERBORN
DOVER
LEICESTER
8
HOPKINTON
WARREN
BROOKFIELD
EAST BROOKFIELD
AUBURN
37
MILLBURY
32
GRAFTON
21
HOLLISTON
MILLIS
MEDFIELD
UPTON
MILFORD
8
MEDWAY
WALPOLE
BRIMFIELD
CHARLTON
OXFORD
20
SUTTON
NORTHBRIDGE
6
HOPEDALE
NORFOLK
MENDON
FRANKLIN
BELLINGHAM
WRENTHAM
STURBRIDGE
8
SOUTHBRIDGE
31
DUDLEY
16
WEBSTER
35
DOUGLAS
UXBRIDGE
10
MILLVILLE
BLACKSTONE
WALES
HOLLAND
PLAINVILLE
NORTH ATTLEBOROUGH
ATTLEBORO
SEEKONK
REHOB

LEGEND

☐ 0-2%

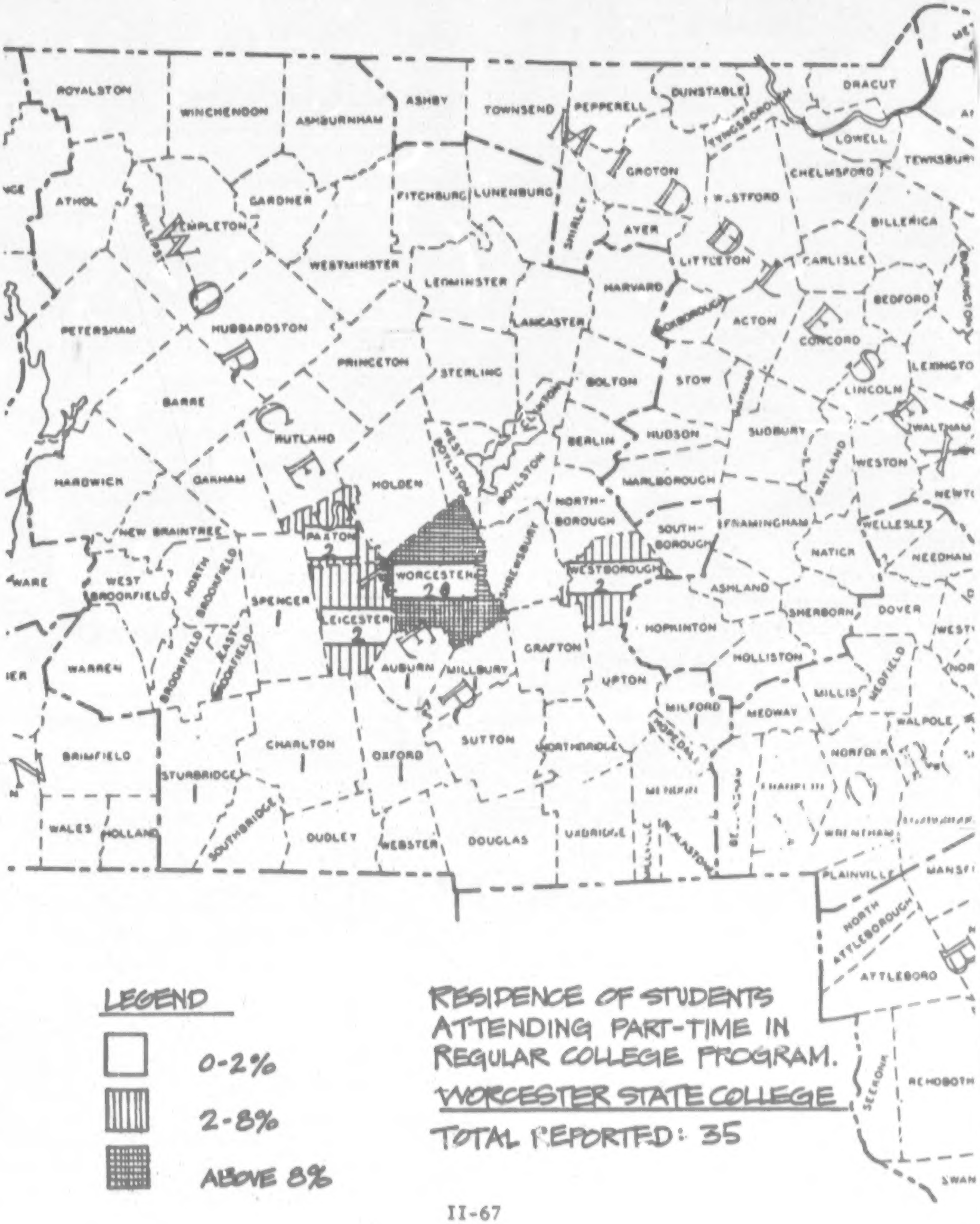
▥ 2-8%

▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING PROGRAM OF CONTINUING COLLEGE WORCESTER STATE COLLEGE

TOTAL REPORTED: 1066

NOTE: TOWNS WITH LESS THAN SIX STUDENTS ARE OMITTED


WORCESTER
MIDDLESEX
ROYALSTON
WINCHENDON
ASHBURNHAM
ASHBY
TOWNSEND
PEPPERELL
DUNSTABLE
TYNGSBOROUGH
DRACUT
LOWELL
TEWKSBURY
ATHOL
TEMPLETON
PHILLIPSTON
GARDNER
FITCHBURG
LUNENBURG
SHIRLEY
GROTON
WESTFORD
CHELMSFORD
BILLERICA
AYER
LITTLETON
CARLISLE
WESTMINSTER
LEOMINSTER
HARVARD
BOXBOROUGH
ACTON
BEDFORD
BURLINGTON
PETERSHAM
HUBBARDSTON
LANCASTER
CONCORD
PRINCETON
STERLING
BOLTON
STOW
MAYNARD
LEXINGTON
LINCOLN
BARRE
CLINTON
HUDSON
SUDBURY
WALTHAM
RUTLAND
BERLIN
WAYLAND
WESTON
HARDWICK
OAKHAM
HOLDEN
WEST BOYLSTON
BOYLSTON
MARLBOROUGH
NEWTON
NORTHBOROUGH
SOUTHBOROUGH
FRAMINGHAM
WELLESLEY
NEW BRAINTREE
PAXTON
2
NATICK
NEEDHAM
WARE
WEST BROOKFIELD
NORTH BROOKFIELD
WORCESTER
20
SHREWSBURY
WESTBOROUGH
2
ASHLAND
SPENCER
1
LEICESTER
2
HOPKINTON
SHERBORN
DOVER
WESTWOOD
BROOKFIELD
EAST BROOKFIELD
GRAFTON
1
HOLLISTON
WARREN
AUBURN
1
MILLBURY
UPTON
MILLIS
MEDFIELD
MILFORD
1
MEDWAY
WALPOLE
CHARLTON
1
OXFORD
1
SUTTON
NORTHBRIDGE
HOPEDALE
NORFOLK
BRIMFIELD
STURBRIDGE
1
MENDON
BELLINGHAM
FRANKLIN
WALES
HOLLAND
SOUTHBRIDGE
DUDLEY
WEBSTER
DOUGLAS
UXBRIDGE
MILLVILLE
BLACKSTONE
WRENTHAM
PLAINVILLE
MANSFIELD
NORTH ATTLEBOROUGH
ATTLEBORO
SEEKONK
REHOBOTH
SWANSEA

LEGEND

☐ 0-2%

▥ 2-8%

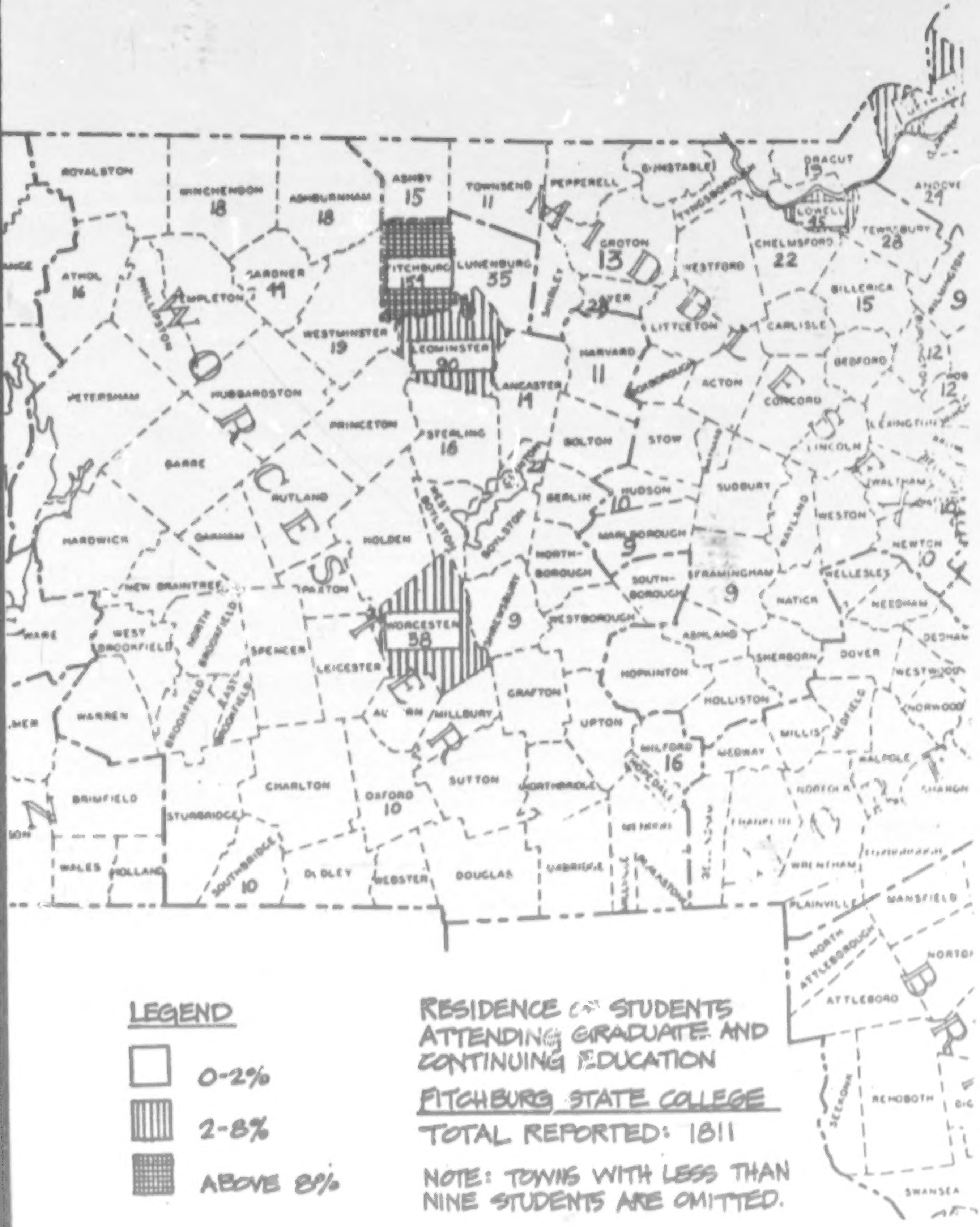
▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING PART-TIME IN REGULAR COLLEGE PROGRAM.

WORCESTER STATE COLLEGE

TOTAL REPORTED: 35

FITCHBURG/GARDNER
GEOGRAPHIC SERVICE AREA
(Central Region)



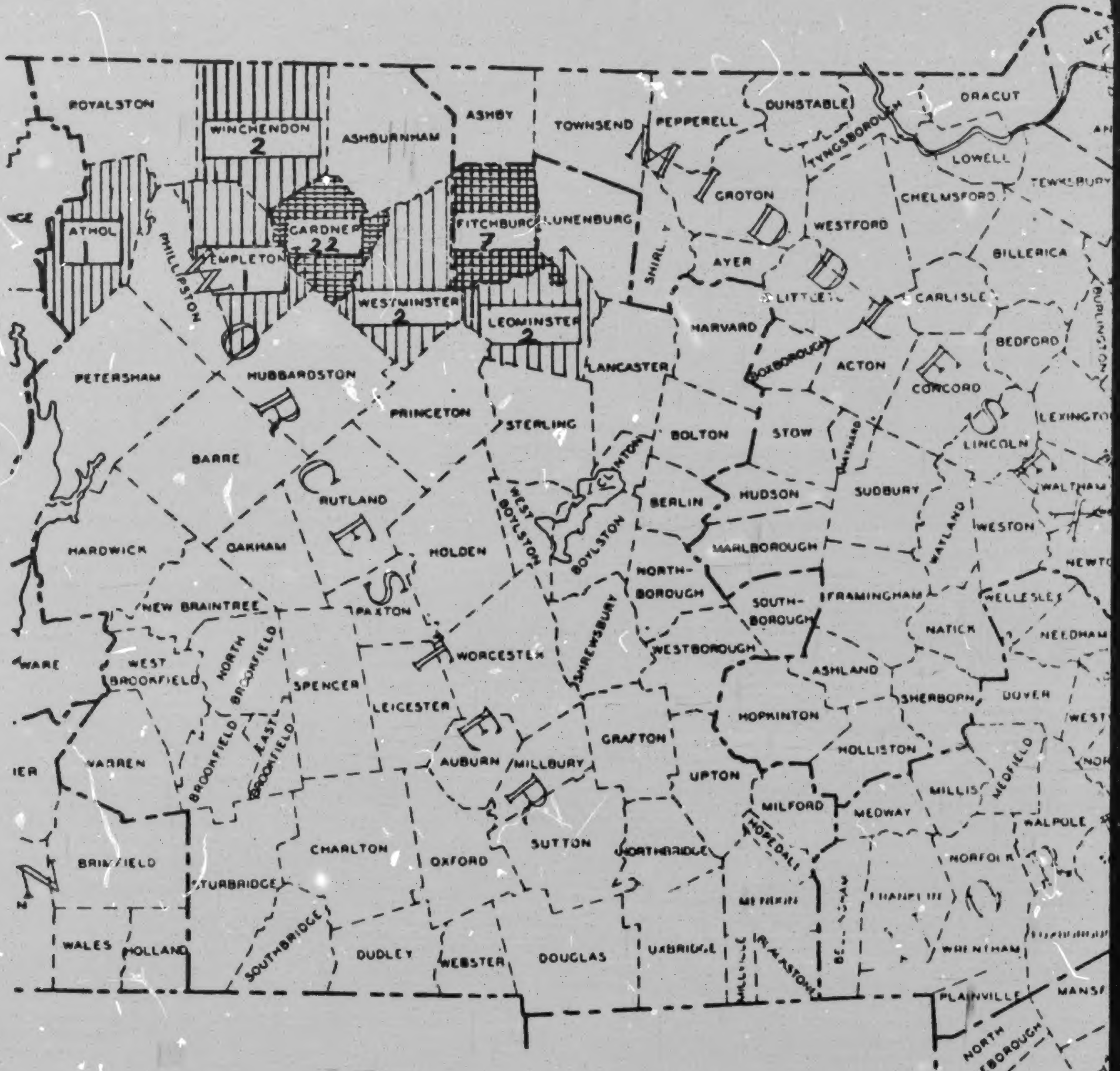
WORCESTER
MIDDLESEX
ROYALSTON
WINCHENDON 18
ASHBURNHAM 18
ASHBY 15
TOWNSEND 11
PEPPERELL
DUNSTABLE
TYNGSBOROUGH
DRACUT 19
LOWELL 45
ANDOVER 29
ATHOL 16
TEMPLETON
GARDNER 44
FITCHBURG 154
LUNENBURG 35
GROTON 13
SHIRLEY
AYER 24
WESTFORD
CHELMSFORD 22
TEWKSBURY 28
BILLERICA 15
WILMINGTON 9
PHILLIPSTON
WESTMINSTER 19
LEOMINSTER 90
LANCASTER 14
HARVARD 11
LITTLETON
CARLISLE
BEDFORD
12
12
BOXBOROUGH
ACTON
CONCORD
LEXINGTON
PETERSHAM
HUBBARDSTON
PRINCETON
STERLING 18
BOLTON
STOW
LINCOLN
BARRE
RUTLAND
WEST BOYLSTON
BOYLSTON
BERLIN
HUDSON 10
SUDBURY
WALTHAM
WESTON
MAYNARD
WAYLAND
HARDWICK
OAKHAM
HOLDEN
MARLBOROUGH 9
NEWTON 10
NEW BRAINTREE
PAXTON
NORTHBOROUGH
SOUTHBOROUGH
FRAMINGHAM 9
NATICK
WELLESLEY
NEEDHAM
WARE
WEST BROOKFIELD
NORTH BROOKFIELD
SPENCER
LEICESTER
WORCESTER 58
SHREWSBURY 9
WESTBOROUGH
ASHLAND
SHERBORN
DOVER
DEDHAM
WESTWOOD
HOPKINTON
HOLLISTON
MEDFIELD
NORWOOD
WARREN
BROOKFIELD
EAST BROOKFIELD
AUBURN
MILLBURY
GRAFTON
UPTON
MILFORD 16
MEDWAY
MILLIS
WALPOLE
SHARON
NORFOLK
PALMER
BRIMFIELD
STURBRIDGE
CHARLTON
OXFORD 10
SUTTON
NORTHBRIDGE
HOPEDALE
MENDON
FRANKLIN
WRENTHAM
FOXBOROUGH
WALES
HOLLAND
SOUTHBRIDGE 10
DUDLEY
WEBSTER
DOUGLAS
UXBRIDGE
MILLVILLE
BLACKSTONE
BELLINGHAM
PLAINVILLE
MANSFIELD
NORTH ATTLEBOROUGH
ATTLEBORO
NORTON
SEEKONK
REHOBOTH
SWANSEA
LEGEND
☐ 0-2%
▥ 2-8%
▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING GRADUATE AND CONTINUING EDUCATION

FITCHBURG STATE COLLEGE

TOTAL REPORTED: 1811

NOTE: TOWNS WITH LESS THAN NINE STUDENTS ARE OMITTED.


ROYALSTON
WINCHENDON 2
ASHBURNHAM
ASHBY
TOWNSEND
PEPPERELL
DUNSTABLE
TYNGSBOROUGH
DRACUT
LOWELL
ATHOL 1
PHILLIPSTON
TEMPLETON 1
GARDNER 22
FITCHBURG 7
LUNENBURG
WESTMINSTER 2
LEOMINSTER 2
SHIRLEY
GROTON
AYER
WESTFORD
CHELMSFORD
TEWKSBURY
BILLERICA
LITTLETON
CARLISLE
BEDFORD
BURLINGTON
HARVARD
BOXBOROUGH
ACTON
CONCORD
LEXINGTON
PETERSHAM
HUBBARDSTON
LANCASTER
PRINCETON
STERLING
BOLTON
STOW
MAYNARD
LINCOLN
BARRE
RUTLAND
CLINTON
BERLIN
HUDSON
SUDBURY
WALTHAM
WEST BOYLSTON
BOYLSTON
WAYLAND
WESTON
HARDWICK
OAKHAM
HOLDEN
NORTHBOROUGH
MARLBOROUGH
NEWTON
NEW BRAINTREE
PAXTON
SHREWSBURY
SOUTHBOROUGH
FRAMINGHAM
WELLESLEY
NATICK
NEEDHAM
WARE
WEST BROOKFIELD
NORTH BROOKFIELD
SPENCER
WORCESTER
WESTBOROUGH
ASHLAND
SHERBORN
DOVER
LEICESTER
HOPKINTON
HOLLISTON
BROOKFIELD
EAST BROOKFIELD
WARREN
AUBURN
MILLBURY
GRAFTON
UPTON
MILLIS
MEDFIELD
MILFORD
MEDWAY
WALPOLE
BRIMFIELD
CHARLTON
OXFORD
SUTTON
NORTHBRIDGE
HOPEDALE
NORFOLK
STURBRIDGE
MENDON
BELLINGHAM
FRANKLIN
WALES
HOLLAND
SOUTHBRIDGE
DUDLEY
WEBSTER
DOUGLAS
UXBRIDGE
MILLVILLE
BLACKSTONE
WRENTHAM
PLAINVILLE
MANSFIELD
NORTH ATTLEBOROUGH
ATTLEBORO
SEEKONK
REHOBOTH
SWANSEA
WORCESTER
MIDDLESEX
NORFOLK

LEGEND

☐ 0-2%

▥ 2-8%

▦ ABOVE 8%

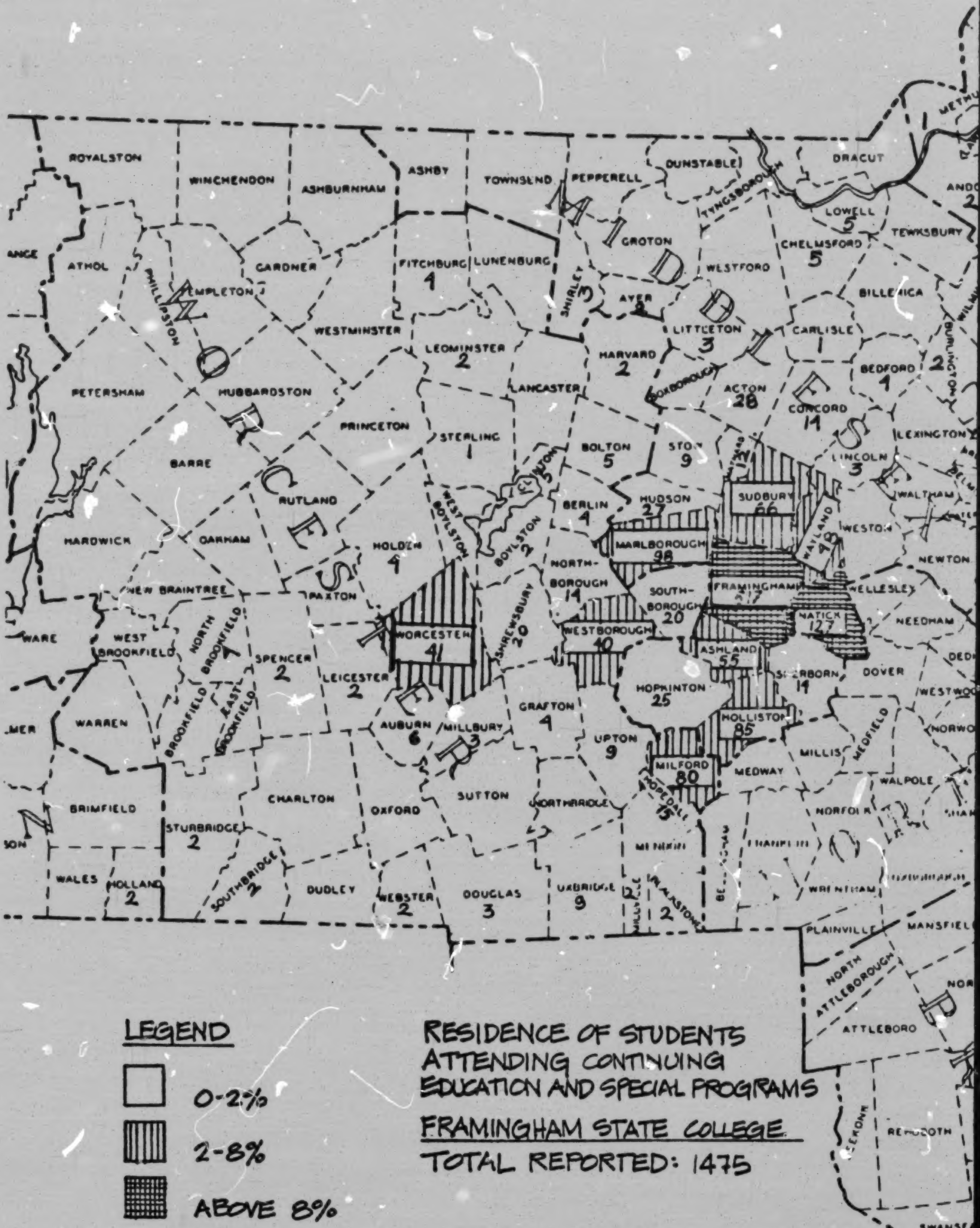
RESIDENCE OF STUDENTS ATTENDING PART-TIME IN REGULAR COLLEGE PROGRAM.

MT. WACHUSETT COMMUNITY COLLEGE

TOTAL REPORTED: 37

FRAMINGHAM AREA

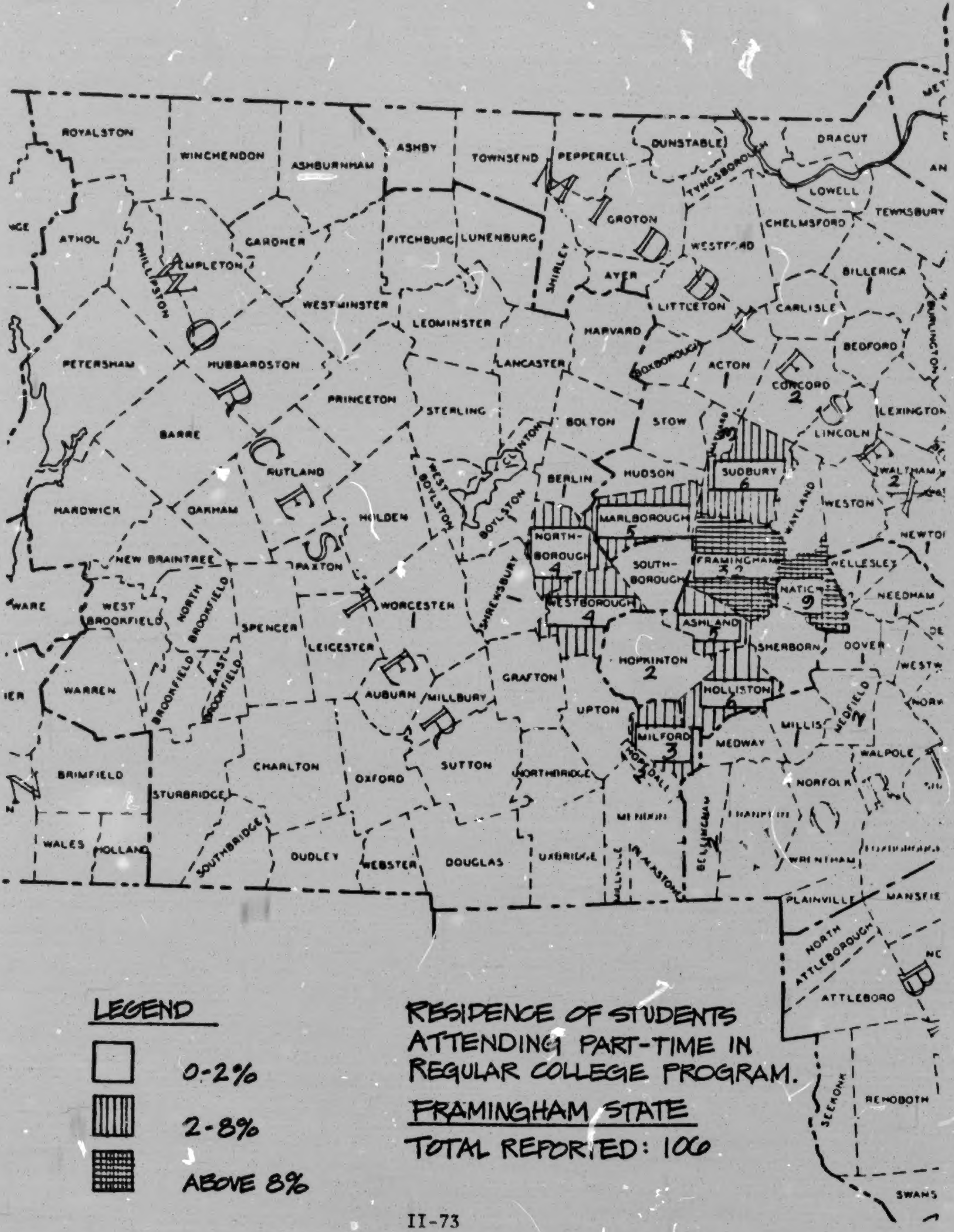
(Central Region)


MIDDLESEX
WORCESTER
NORFOLK
ROYALSTON
WINCHENDON
ASHBURNHAM
ASHBY
TOWNSEND
PEPPERELL
DUNSTABLE
TYNGSBOROUGH
DRACUT
LOWELL 5
TEWKSBURY
ATHOL
PHILLIPSTON
TEMPLETON
GARDNER
FITCHBURG 4
LUNENBURG
SHIRLEY 3
GROTON
AYER 2
WESTFORD
CHELMSFORD 5
BILLERICA
WESTMINSTER
LEOMINSTER 2
HARVARD 2
LITTLETON 3
CARLISLE
BEDFORD 4
BURLINGTON 2
PETERSHAM
HUBBARDSTON
LANCASTER
BOXBOROUGH
ACTON 28
CONCORD 14
LEXINGTON
PRINCETON
STERLING 1
BOLTON 5
STOW 9
LINCOLN 3
BARRE
CLINTON 5
HUDSON 27
SUDBURY 66
WALTHAM
RUTLAND
WEST BOYLSTON
BERLIN 4
WAYLAND 48
WESTON
HARDWICK
OAKHAM
HOLDEN 4
BOYLSTON 2
MARLBOROUGH 98
NEWTON
NORTHBOROUGH 14
SOUTHBOROUGH 20
FRAMINGHAM 217
WELLESLEY
NEW BRAINTREE
PAXTON
NATICK 127
NEEDHAM
WARE
WEST BROOKFIELD
NORTH BROOKFIELD
SPENCER 2
WORCESTER 41
SHREWSBURY 20
WESTBOROUGH 40
ASHLAND 55
LEICESTER 2
HOPKINTON 25
SHERBORN 14
DOVER
WESTWOOD
WARREN
BROOKFIELD
EAST BROOKFIELD
AUBURN 6
MILLBURY 3
GRAFTON 4
UPTON 9
HOLLISTON 85
MILLIS
MEDFIELD
NORWOOD
MILFORD 80
MEDWAY
WALPOLE
BRIMFIELD
CHARLTON
OXFORD
SUTTON
NORTHBRIDGE
HOPEDALE 15
NORFOLK
STURBRIDGE 2
MENDON
FRANKLIN
BELLINGHAM
WALES
HOLLAND 2
SOUTHBRIDGE 2
DUDLEY
WEBSTER 2
DOUGLAS 3
UXBRIDGE 9
MILLVILLE 2
BLACKSTONE 2
WRENTHAM
PLAINVILLE
MANSFIELD
NORTH ATTLEBOROUGH
ATTLEBORO
SEEKONK
REHOBOTH
SWANSEA
LEGEND
0-2%
2-8%
ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING CONTINUING EDUCATION AND SPECIAL PROGRAMS

FRAMINGHAM STATE COLLEGE

TOTAL REPORTED: 1475


WORCESTER
MIDDLESEX
NORFOLK
ROYALSTON
WINCHENDON
ASHBURNHAM
ASHBY
TOWNSEND
PEPPERELL
DUNSTABLE
TYNGSBOROUGH
DRACUT
LOWELL
TEWKSBURY
ATHOL
PHILLIPSTON
TEMPLETON
GARDNER
FITCHBURG
LUNENBURG
SHIRLEY
GROTON
WESTFORD
CHELMSFORD
BILLERICA
AYER
LITTLETON
CARLISLE
BURLINGTON
WESTMINSTER
LEOMINSTER
HARVARD
BOXBOROUGH
ACTON
1
BEDFORD
PETERSHAM
HUBBARDSTON
LANCASTER
CONCORD
2
PRINCETON
STERLING
BOLTON
STOW
MAYNARD
LEXINGTON
BARRE
CLINTON
30
LINCOLN
RUTLAND
WEST BOYLSTON
BERLIN
HUDSON
SUDBURY
6
WALTHAM
2
HARDWICK
OAKHAM
HOLDEN
BOYLSTON
MARLBOROUGH
5
WAYLAND
WESTON
NEWTON
NEW BRAINTREE
PAXTON
NORTHBOROUGH
4
SOUTHBOROUGH
FRAMINGHAM
32
WELLESLEY
WARE
WEST BROOKFIELD
NORTH BROOKFIELD
SPENCER
WORCESTER
1
SHREWSBURY
1
WESTBOROUGH
4
NATICK
9
NEEDHAM
LEICESTER
ASHLAND
5
SHERBORN
DOVER
BROOKFIELD
EAST BROOKFIELD
HOPKINTON
2
WESTWOOD
WARREN
AUBURN
MILLBURY
GRAFTON
HOLLISTON
6
UPTON
MILLIS
MEDFIELD
2
NORWOOD
MILFORD
3
MEDWAY
WALPOLE
BRIMFIELD
CHARLTON
OXFORD
SUTTON
NORTHBRIDGE
HOPEDALE
2
NORFOLK
STURBRIDGE
MENDON
BELLINGHAM
2
FRANKLIN
WALES
HOLLAND
SOUTHBRIDGE
DUDLEY
WEBSTER
DOUGLAS
UXBRIDGE
MILLVILLE
BLACKSTONE
WRENTHAM
FOXBOROUGH
PLAINVILLE
MANSFIELD
NORTH ATTLEBOROUGH
ATTLEBORO
SEEKONK
REHOBOTH
SWANSEA
LEGEND
☐ 0-2%
▥ 2-8%
▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING PART-TIME IN REGULAR COLLEGE PROGRAM.

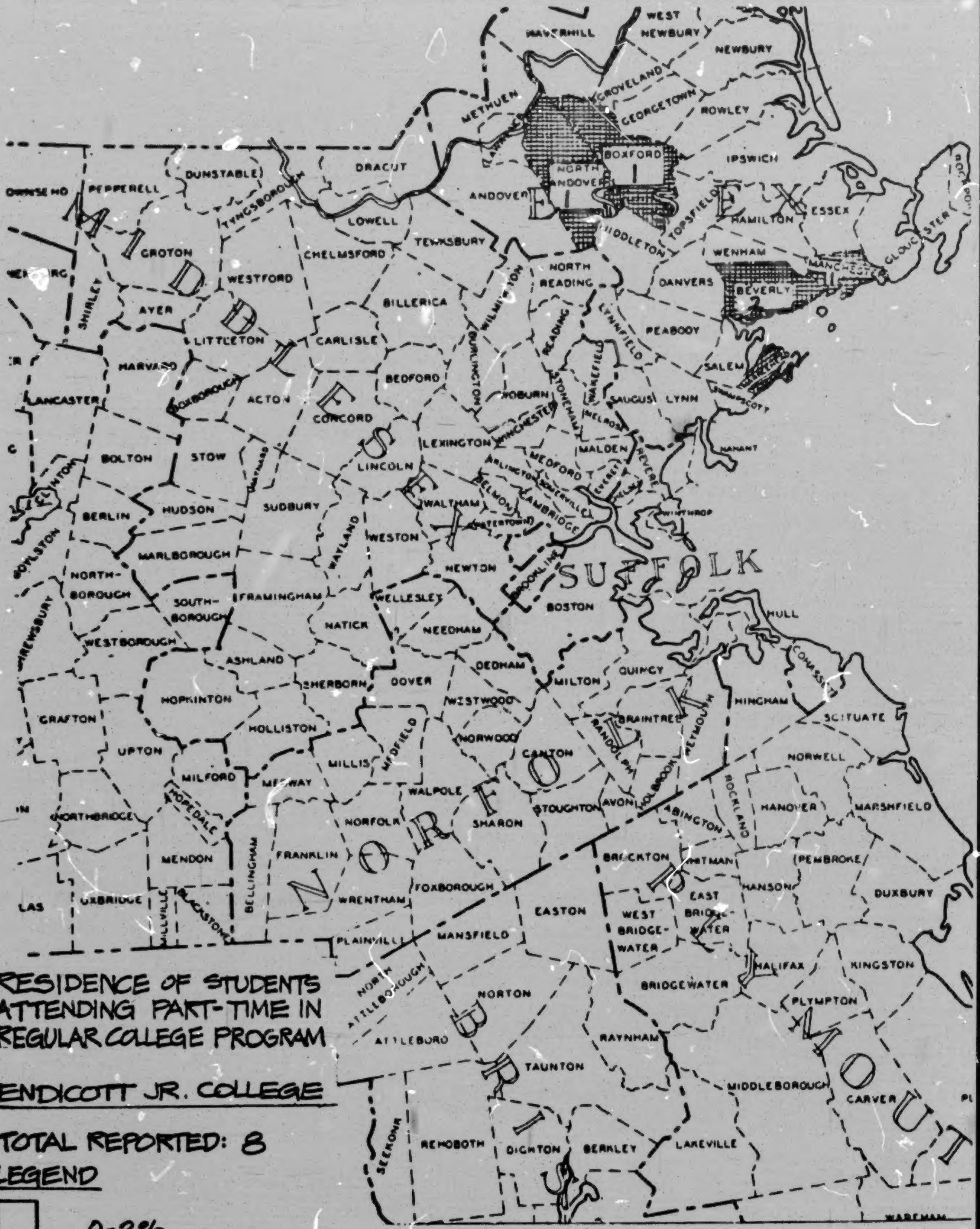
FRAMINGHAM STATE

TOTAL REPORTED: 106

LYNN/SALEM

GEOGRAPHIC SERVICE AREA

(Northeast Region)


ESSEX
MIDDLESEX
SUFFOLK
NORFOLK
BRISTOL
PLYMOUTH
HAVERHILL
WEST NEWBURY
NEWBURY
METHUEN
GROVELAND
GEORGETOWN
ROWLEY
LAWRENCE
BOXFORD
1
NORTH ANDOVER
IPSWICH
ANDOVER
TOPSFIELD
HAMILTON
ESSEX
MIDDLETON
WENHAM
MANCHESTER
GLOUCESTER
ROCKPORT
NORTH READING
DANVERS
BEVERLY
2
PEABODY
SALEM
MARBLEHEAD
SWAMPSCOTT
LYNN
LYNNFIELD
SAUGUS
NAHANT
DUNSTABLE
DRACUT
TOWNSEND
PEPPERELL
TYNGSBOROUGH
LOWELL
TEWKSBURY
GROTON
CHELMSFORD
WESTFORD
BILLERICA
SHIRLEY
AYER
WILMINGTON
LITTLETON
CARLISLE
BURLINGTON
READING
WAKEFIELD
HARVARD
BOXBOROUGH
ACTON
BEDFORD
WOBURN
STONEHAM
LANCASTER
CONCORD
WINCHESTER
MELROSE
LEXINGTON
MALDEN
BOLTON
STOW
MAYNARD
LINCOLN
MEDFORD
REVERE
ARLINGTON
SOMERVILLE
EVERETT
CHELSEA
CLINTON
HUDSON
SUDBURY
WALTHAM
BELMONT
CAMBRIDGE
WINTHROP
BERLIN
WATERTOWN
BOYLSTON
MARLBOROUGH
WAYLAND
WESTON
NEWTON
BROOKLINE
NORTHBOROUGH
SOUTHBOROUGH
FRAMINGHAM
WELLESLEY
BOSTON
HULL
SHREWSBURY
WESTBOROUGH
NATICK
NEEDHAM
ASHLAND
COHASSET
DEDHAM
QUINCY
SHERBORN
DOVER
MILTON
HOPKINTON
WESTWOOD
HINGHAM
SCITUATE
GRAFTON
HOLLISTON
BRAINTREE
WEYMOUTH
RANDOLPH
NORWOOD
CANTON
UPTON
MEDFIELD
MILLIS
NORWELL
MILFORD
MEDWAY
WALPOLE
HOLBROOK
ROCKLAND
HOPEDALE
STOUGHTON
AVON
ABINGTON
HANOVER
MARSHFIELD
NORTHBRIDGE
NORFOLK
SHARON
MENDON
FRANKLIN
BELLINGHAM
BROCKTON
WHITMAN
PEMBROKE
UXBRIDGE
MILLVILLE
BLACKSTONE
WRENTHAM
FOXBOROUGH
EASTON
WEST BRIDGEWATER
EAST BRIDGEWATER
HANSON
DUXBURY
PLAINVILLE
MANSFIELD
HALIFAX
KINGSTON
NORTH ATTLEBOROUGH
NORTON
BRIDGEWATER
PLYMPTON
ATTLEBORO
RAYNHAM
TAUNTON
MIDDLEBOROUGH
CARVER
SEEKONK
REHOBOTH
DIGHTON
BERKLEY
LAKEVILLE
WAREHAM

RESIDENCE OF STUDENTS ATTENDING PART-TIME IN REGULAR COLLEGE PROGRAM

ENDICOTT JR. COLLEGE

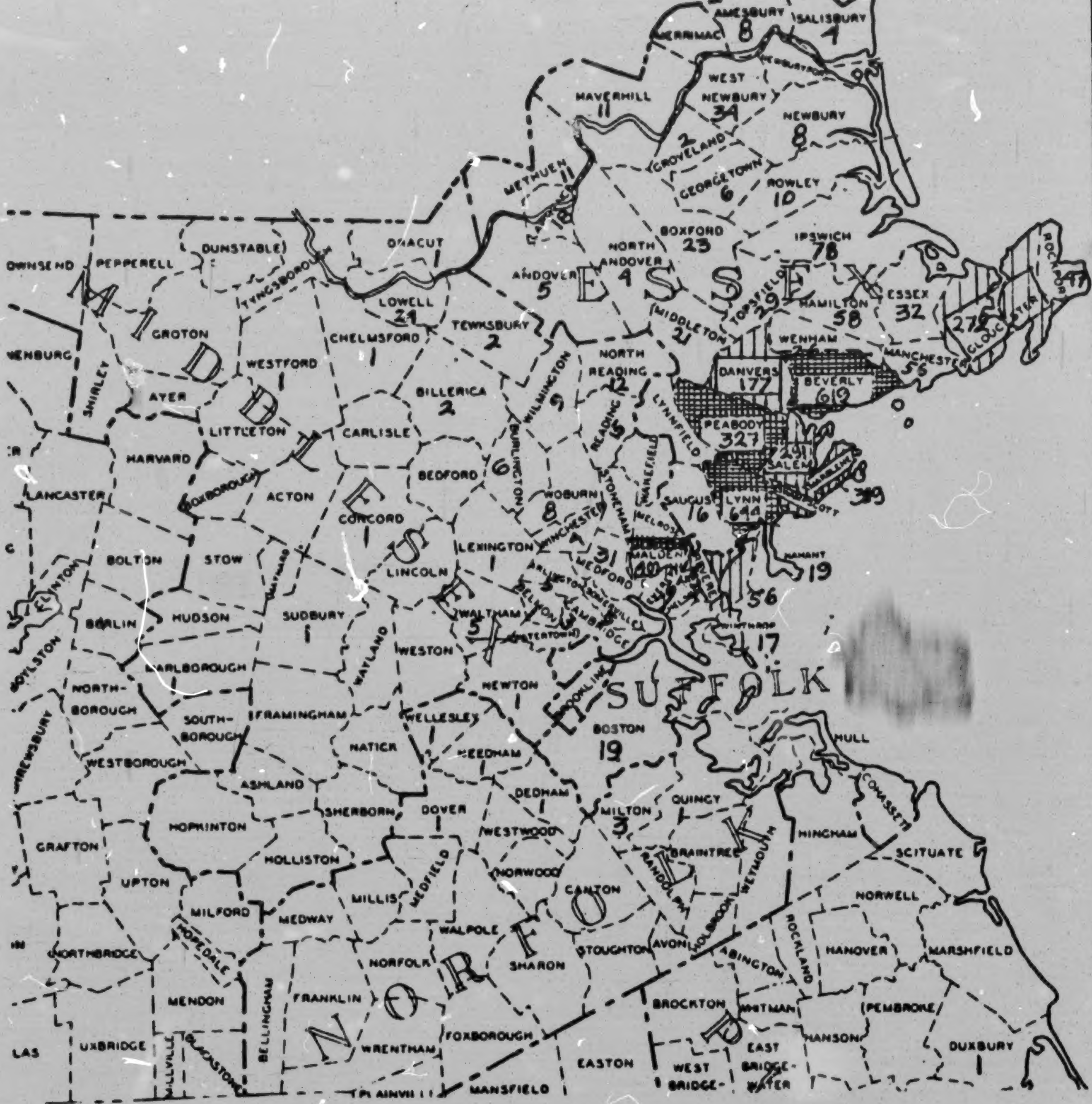
TOTAL REPORTED: 8

LEGEND

☐ 0-2%

▥ 2-8%

▦ ABOVE 8%


AMESBURY 8
SALISBURY 4
MERRIMAC
WEST NEWBURY 34
HAVERHILL 11
NEWBURY 8
GROVELAND 2
GEORGETOWN 6
ROWLEY 10
METHUEN 11
LAWRENCE 18
BOXFORD 23
IPSWICH 78
NORTH ANDOVER 4
ANDOVER 5
ESSEX
TOPSFIELD 29
HAMILTON 58
ESSEX 32
ROCKPORT 47
GLOUCESTER 275
DRACUT
LOWELL 21
TEWKSBURY 2
MIDDLETON 21
WENHAM
MANCHESTER 55
OWNSEND
PEPPERELL
DUNSTABLE
TYNGSBOROUGH
MIDDLESEX
GROTON
CHELMSFORD 1
WESTFORD 1
BILLERICA 2
WILMINGTON 5
NORTH READING 12
DANVERS 177
BEVERLY 619
SHIRLEY
AYER
LITTLETON
CARLISLE
BURLINGTON 6
READING 15
LYNNFIELD
PEABODY 327
SALEM 291
MARBLEHEAD 389
SWAMPSCOTT
HARVARD
BOXBOROUGH
ACTON
BEDFORD
WOBURN 8
STONEHAM
WAKEFIELD
SAUGUS 16
LYNN 644
NAHANT 19
LANCASTER
CONCORD
LEXINGTON 1
WINCHESTER
MELROSE
MALDEN 40
BOLTON
STOW
MAYNARD
LINCOLN
MEDFORD 31
ARLINGTON
REVERE 56
CLINTON
BERLIN
HUDSON
SUDBURY 1
WALTHAM 5
BELMONT
SOMERVILLE
CAMBRIDGE
WATERTOWN
WINTHROP 17
WAYLAND
WESTON
MARLBOROUGH
NEWTON 1
BROOKLINE
SUFFOLK
BOYLSTON
NORTH-BOROUGH
SOUTH-BOROUGH
FRAMINGHAM
WELLESLEY
BOSTON 19
HULL
SHREWSBURY
NATICK
NEEDHAM
WESTBOROUGH
ASHLAND
DEDHAM
QUINCY
COHASSET
HOPKINTON
SHERBORN
DOVER
MILTON 3
WESTWOOD
GRAFTON
HOLLISTON
BRAINTREE
HINGHAM
SCITUATE
MEDFIELD
NORWOOD
RANDOLPH
WEYMOUTH
UPTON
MILLIS
CANTON
NORWELL
MILFORD
MEDWAY
WALPOLE
HOLBROOK
ROCKLAND
NORTHBRIDGE
HOPEDALE
NORFOLK
SHARON
STOUGHTON
AVON
ABINGTON
HANOVER
MARSHFIELD
MENDON
BELLINGHAM
FRANKLIN
NORFOLK
BROCKTON
WHITMAN
PEMBROKE
HANSON
LAS
UXBRIDGE
MILLVILLE
BLACKSTONE
WRENTHAM
FOXBOROUGH
EASTON
WEST BRIDGE-
EAST BRIDGE-WATER
DUXBURY 1
PLAINVILLE
MANSFIELD
P

RESIDENCE OF STUDENTS ATTENDING CONTINUING EDUCATION

NORTH SHORE COMMUNITY COLLEGE

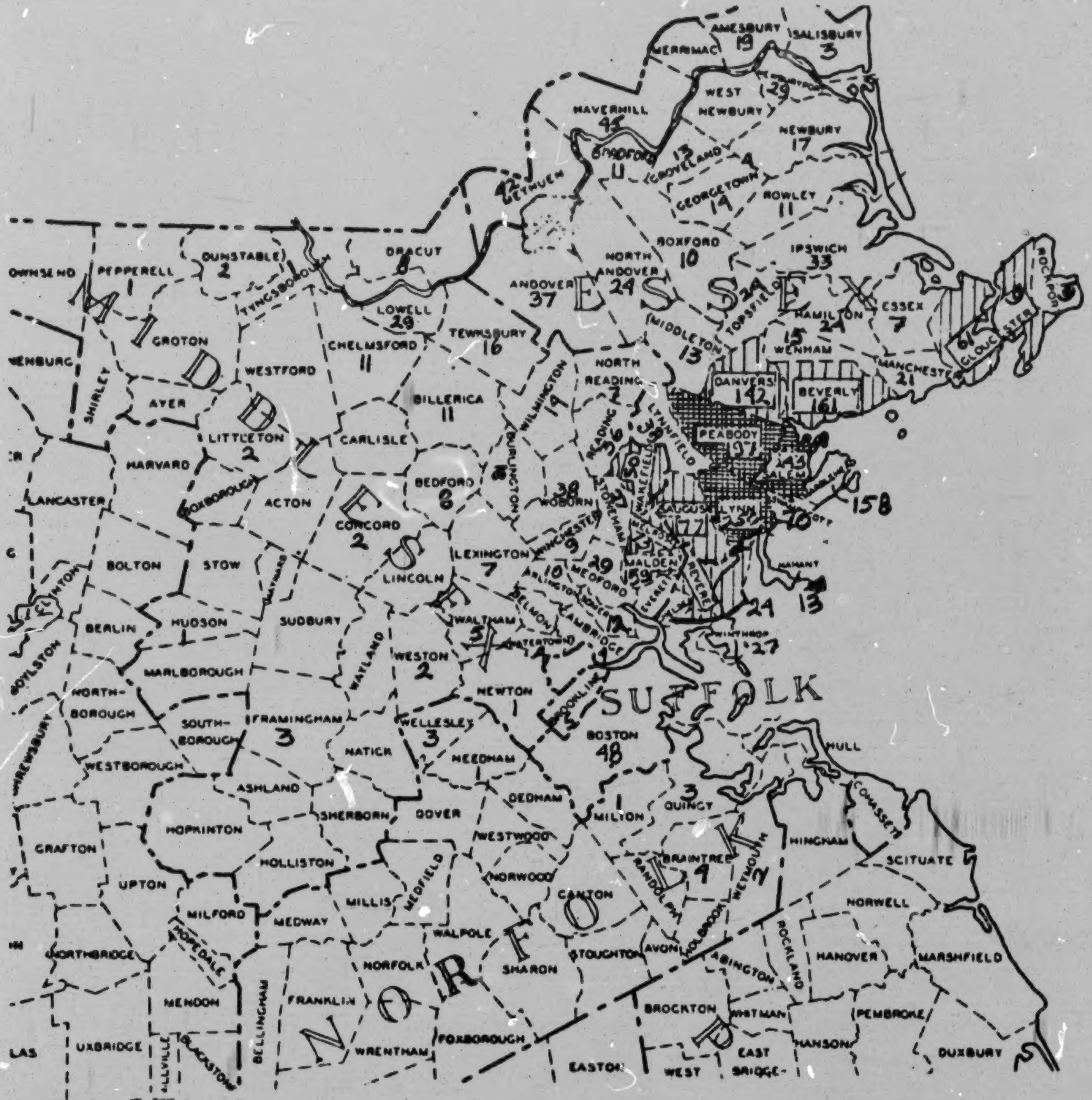
TOTAL REPORTED : 4291

LEGEND

☐ 0-2%

▥ 2-8%

▦ ABOVE 8%


ESSEX
MIDDLESEX
SUFFOLK
NORFOLK
AMESBURY 19
SALISBURY 3
MERRIMAC
WEST NEWBURY
29
HAVERHILL 45
NEWBURY 17
BRADFORD 11
13
GROVELAND
4
GEORGETOWN 19
ROWLEY 11
METHUEN 42
BOXFORD 10
IPSWICH 33
NORTH ANDOVER 24
ANDOVER 37
DRACUT 8
DUNSTABLE 2
PEPPERELL 1
OWNSEND
TYNGSBOROUGH
LOWELL 29
TEWKSBURY 16
CHELMSFORD 11
TOPSFIELD 24
HAMILTON 24
ESSEX 7
15
WENHAM
MIDDLETON 13
MANCHESTER 21
GLOUCESTER 61
ROCKPORT
GROTON
WESTFORD
NEWBURG
SHIRLEY
AYER
LITTLETON 2
HARVARD
BOXBOROUGH
ACTON
CARLISLE
BILLERICA 11
NORTH READING 7
WILMINGTON 19
BURLINGTON
BEDFORD 8
READING 36
38
LYNNFIELD
DANVERS 142
BEVERLY 161
PEABODY 197
243
SALEM
MARBLEHEAD
158
SWAMPSCOTT
70
LYNN 253
SAUGUS 77
WAKEFIELD
STONEHAM
27
MELROSE
WOBURN 38
WINCHESTER 9
MEDFORD 29
ARLINGTON 10
MALDEN 159
EVERETT
REVERE
NAHANT
13
24
WINTHROP 27
SOMERVILLE
CAMBRIDGE 12
BELMONT
WATERTOWN
WALTHAM 5
LANCASTER
CONCORD 2
LEXINGTON 7
LINCOLN
BOLTON
STOW
MAYNARD
CLINTON
BERLIN
HUDSON
SUDBURY
BOYLSTON
MARLBOROUGH
WAYLAND
WESTON 2
NEWTON 1
BROOKLINE 13
NORTHBOROUGH
SOUTHBOROUGH
FRAMINGHAM 3
WELLESLEY 3
NATICK
BOSTON 48
HULL
SHREWSBURY
WESTBOROUGH
NEEDHAM
ASHLAND
DEDHAM
3
QUINCY
1
MILTON
COHASSET
GRAFTON
HOPKINTON
SHERBORN
DOVER
WESTWOOD
HINGHAM
SCITUATE
UPTON
HOLLISTON
NORWOOD
BRAINTREE 19
2
WEYMOUTH
RANDOLPH
MEDFIELD
MILLIS
CANTON
NORWELL
MILFORD
MEDWAY
WALPOLE
HOLBROOK
ROCKLAND
NORTHBRIDGE
HOPEDALE
NORFOLK
SHARON
STOUGHTON
AVON
ABINGTON
HANOVER
MARSHFIELD
MENDON
BELLINGHAM
FRANKLIN
BROCKTON
WHITMAN
PEMBROKE
LAS
UXBRIDGE
MILLVILLE
BLACKSTONE
WRENTHAM
FOXBOROUGH
EASTON
WEST
EAST BRIDGE-
HANSON
DUXBURY

RESIDENCE OF STUDENTS ATTENDING CONTINUING EDUCATION

SALEM STATE COLLEGE

TOTAL REPORTED: 2485

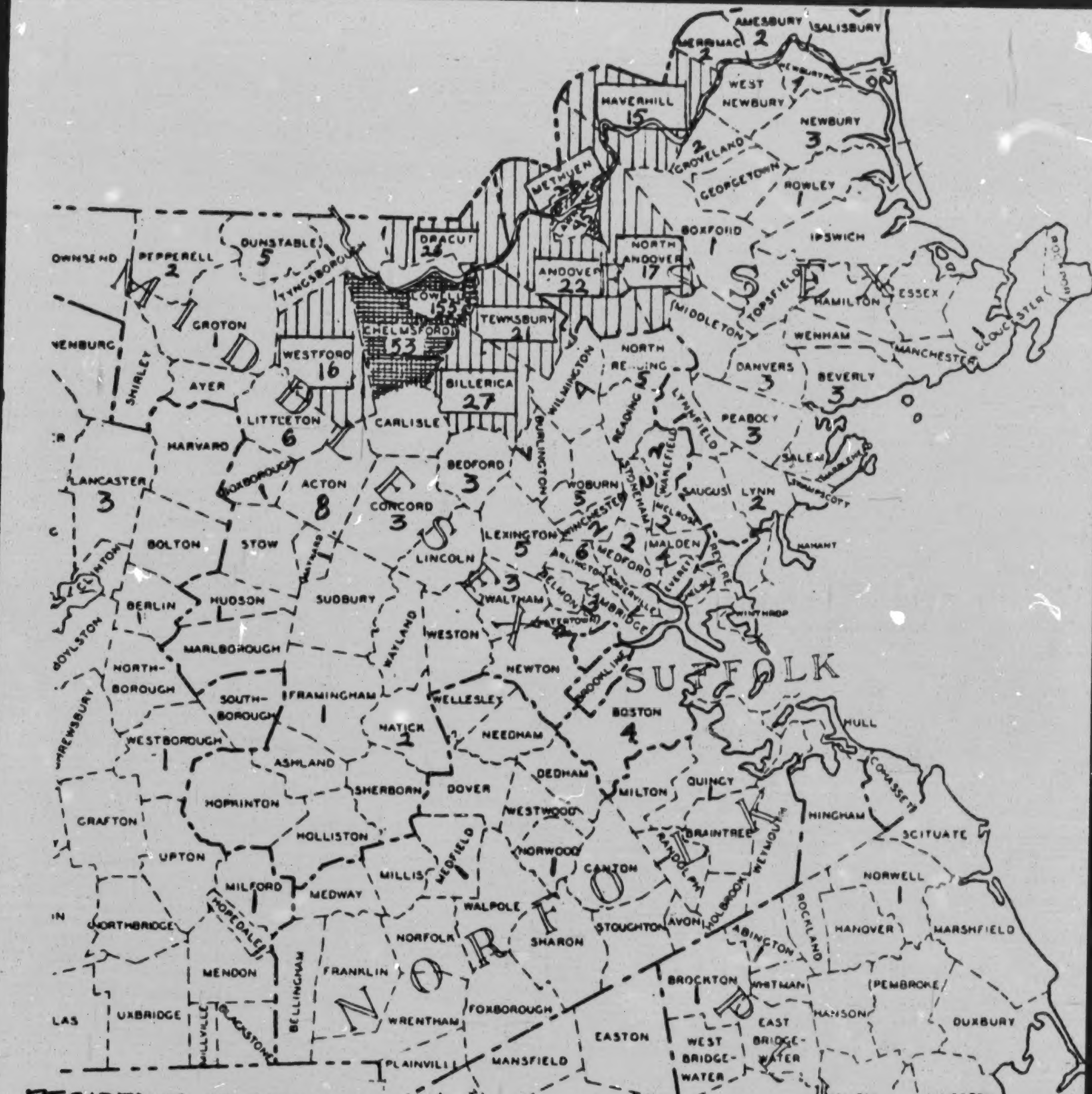
LEGEND

☐ 0-2%

▥ 2-8%

▦ ABOVE 8%

ANDOVER/LOWELL
GEOGRAPHIC SERVICE AREA
(Northeast Region)


AMESBURY 2
SALISBURY
MERRIMAC 2
WEST NEWBURY 1
NEWBURYPORT 1
HAVERHILL 15
NEWBURY 3
GROVELAND 2
GEORGETOWN
ROWLEY 1
METHUEN 28
LAWRENCE
BOXFORD 1
IPSWICH
DUNSTABLE 5
PEPPERELL 2
TOWNSEND
TYNGSBOROUGH
DRACUT 26
ANDOVER 22
NORTH ANDOVER 17
ESSEX
LOWELL 155
CHELMSFORD 53
TEWKSBURY 21
MIDDLETON
TOPSFIELD
HAMILTON
ESSEX
GROTON 1
WESTFORD 16
BILLERICA 27
NORTH READING 5
WENHAM
MANCHESTER
GLOUCESTER
ROCKPORT
LUNENBURG
SHIRLEY
AYER
LITTLETON 6
CARLISLE
WILMINGTON
DANVERS 3
BEVERLY 3
HARVARD
BOXBOROUGH 1
ACTON 8
BEDFORD 3
BURLINGTON
READING
LYNNFIELD
PEABODY 3
SALEM
MARBLEHEAD
LANCASTER 3
CONCORD 3
WOBURN 5
STONEHAM 2
WAKEFIELD 4
SAUGUS
LYNN 2
SWAMPSCOTT
MELROSE 2
BOLTON
STOW
MAYNARD
LEXINGTON 5
WINCHESTER 6
MEDFORD 2
MALDEN 4
REVERE
NAHANT
CLINTON
LINCOLN
ARLINGTON
SOMERVILLE
EVERETT
CHELSEA
BERLIN
HUDSON
SUDBURY
WALTHAM 3
BELMONT
CAMBRIDGE
WATERTOWN
WINTHROP
BOYLSTON
MARLBOROUGH
WAYLAND
WESTON
NEWTON
BROOKLINE
SUFFOLK
NORTHBOROUGH
SOUTHBOROUGH
FRAMINGHAM 1
WELLESLEY
BOSTON 4
SHREWSBURY
WESTBOROUGH 1
NATICK 2
NEEDHAM
HULL
ASHLAND
DEDHAM
COHASSET
HOPKINTON
SHERBORN
DOVER
MILTON
QUINCY
HINGHAM
GRAFTON
WESTWOOD
BRAINTREE
SCITUATE
HOLLISTON
UPTON
MILLIS
MEDFIELD
NORWOOD 1
CANTON
RANDOLPH
HOLBROOK
WEYMOUTH
NORWELL 1
MILFORD 1
MEDWAY
WALPOLE
HOPEDALE
NORTHBRIDGE
NORFOLK
SHARON
STOUGHTON
AVON
ABINGTON
ROCKLAND
HANOVER
MARSHFIELD
MENDON
BELLINGHAM
FRANKLIN
BROCKTON 1
WHITMAN
PEMBROKE
UXBRIDGE
MILLVILLE
BLACKSTONE
WRENTHAM
FOXBOROUGH
EASTON
WEST BRIDGEWATER
EAST BRIDGEWATER
HANSON
DUXBURY
PLAINVILLE
MANSFIELD
HALIFAX
KINGSTON
NORTH ATTLEBOROUGH
NORTON
BRIDGEWATER
PLYMPTON
ATTLEBORO
RAYNHAM
TAUNTON 1
MIDDLEBOROUGH 1
CARVER
PLYMOUTH
SEEKONK
REHOBOTH
DIGHTON
BERKLEY
LAKEVILLE
WAREHAM
MIDDLESEX
ESSEX
NORFOLK
BRISTOL
PLYMOUTH

RESIDENCE OF STUDENTS ATTENDING PART-TIME IN REGULAR COLLEGE PROGRAM

LOWELL STATE

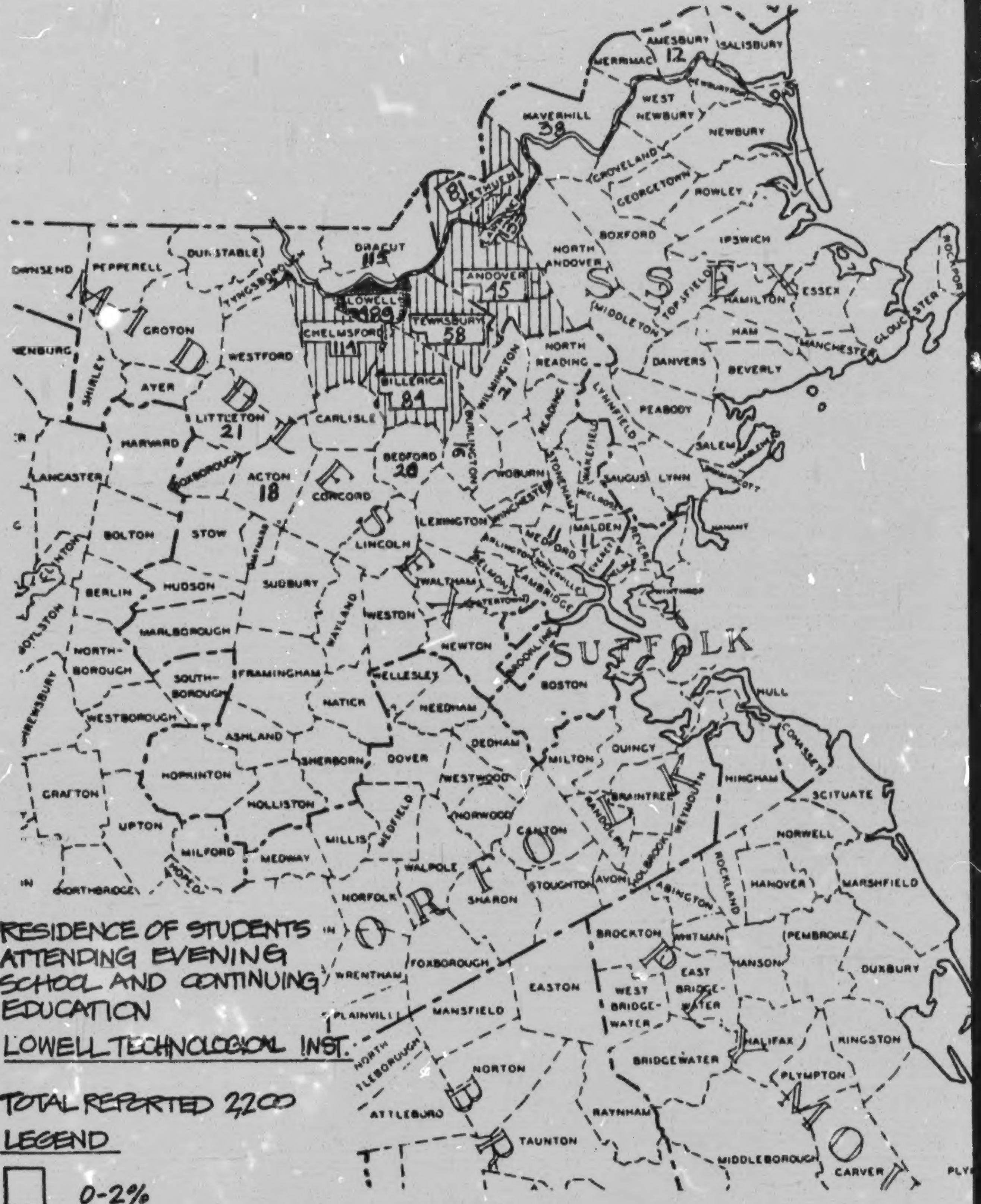
TOTAL REPORTED: 561

LEGEND

☐ 0-2%

▥ 2-8%

▦ ABOVE 8%


AMESBURY 12
SALISBURY
MERRIMAC
WEST NEWBURY
NEWBURY
HAVERHILL 38
GROVELAND
GEORGETOWN
ROWLEY
METHUEN 81
LAWRENCE 15
BOXFORD
IPSWICH
NORTH ANDOVER
ANDOVER 45
ESSEX
TOPSFIELD
HAMILTON
ROCKPORT
GLOUCESTER
MIDDLETON
WENHAM
MANCHESTER
DRACUT 115
LOWELL 989
TEWKSBURY 58
CHELMSFORD 114
BILLERICA 84
DUNSTABLE
TYNGSBOROUGH
TOWNSEND
PEPPERELL
GROTON
WESTFORD
SHIRLEY
AYER
LITTLETON 21
CARLISLE
WILMINGTON 31
NORTH READING
DANVERS
BEVERLY
LYNNFIELD
PEABODY
READING
BURLINGTON 16
BEDFORD 20
HARVARD
BOXBOROUGH
ACTON 18
CONCORD
LANCASTER
BOLTON
STOW
MAYNARD
LEXINGTON
LINCOLN
WOBURN
WINCHESTER
STONEHAM
WAKEFIELD
MELROSE
SAUGUS
LYNN
SALEM
MARBLEHEAD
SWAMPSCOTT
NAHANT
MALDEN 11
MEDFORD
ARLINGTON
BELMONT
SOMERVILLE
EVERETT
CHELSEA
REVERE
WINTHROP
CLINTON
BERLIN
HUDSON
SUDBURY
WALTHAM
WATERTOWN
CAMBRIDGE
BOYLSTON
MARLBOROUGH
WAYLAND
WESTON
NEWTON
BROOKLINE
BOSTON
NORTHBOROUGH
SOUTHBOROUGH
FRAMINGHAM
WELLESLEY
NATICK
NEEDHAM
SHREWSBURY
WESTBOROUGH
ASHLAND
HOPKINTON
SHERBORN
DOVER
DEDHAM
MILTON
QUINCY
HULL
COHASSET
HINGHAM
SCITUATE
WESTWOOD
GRAFTON
HOLLISTON
MEDFIELD
NORWOOD
CANTON
BRAINTREE
RANDOLPH
HOLBROOK
WEYMOUTH
ROCKLAND
NORWELL
UPTON
MILFORD
MEDWAY
MILLIS
WALPOLE
NORTHBRIDGE
HOPEDALE
NORFOLK
SHARON
STOUGHTON
AVON
ABINGTON
HANOVER
MARSHFIELD
BROCKTON
WHITMAN
PEMBROKE
HANSON
DUXBURY
WRENTHAM
FOXBOROUGH
EASTON
WEST BRIDGEWATER
EAST BRIDGEWATER
PLAINVILLE
MANSFIELD
HALIFAX
KINGSTON
NORTH ATTLEBOROUGH
NORTON
BRIDGEWATER
PLYMPTON
ATTLEBORO
RAYNHAM
TAUNTON
MIDDLEBOROUGH
CARVER
ESSEX
MIDDLESEX
SUFFOLK
NORFOLK
PLYMOUTH
BRISTOL

RESIDENCE OF STUDENTS ATTENDING EVENING SCHOOL AND CONTINUING EDUCATION

LOWELL TECHNOLOGICAL INST.

TOTAL REPORTED 2200

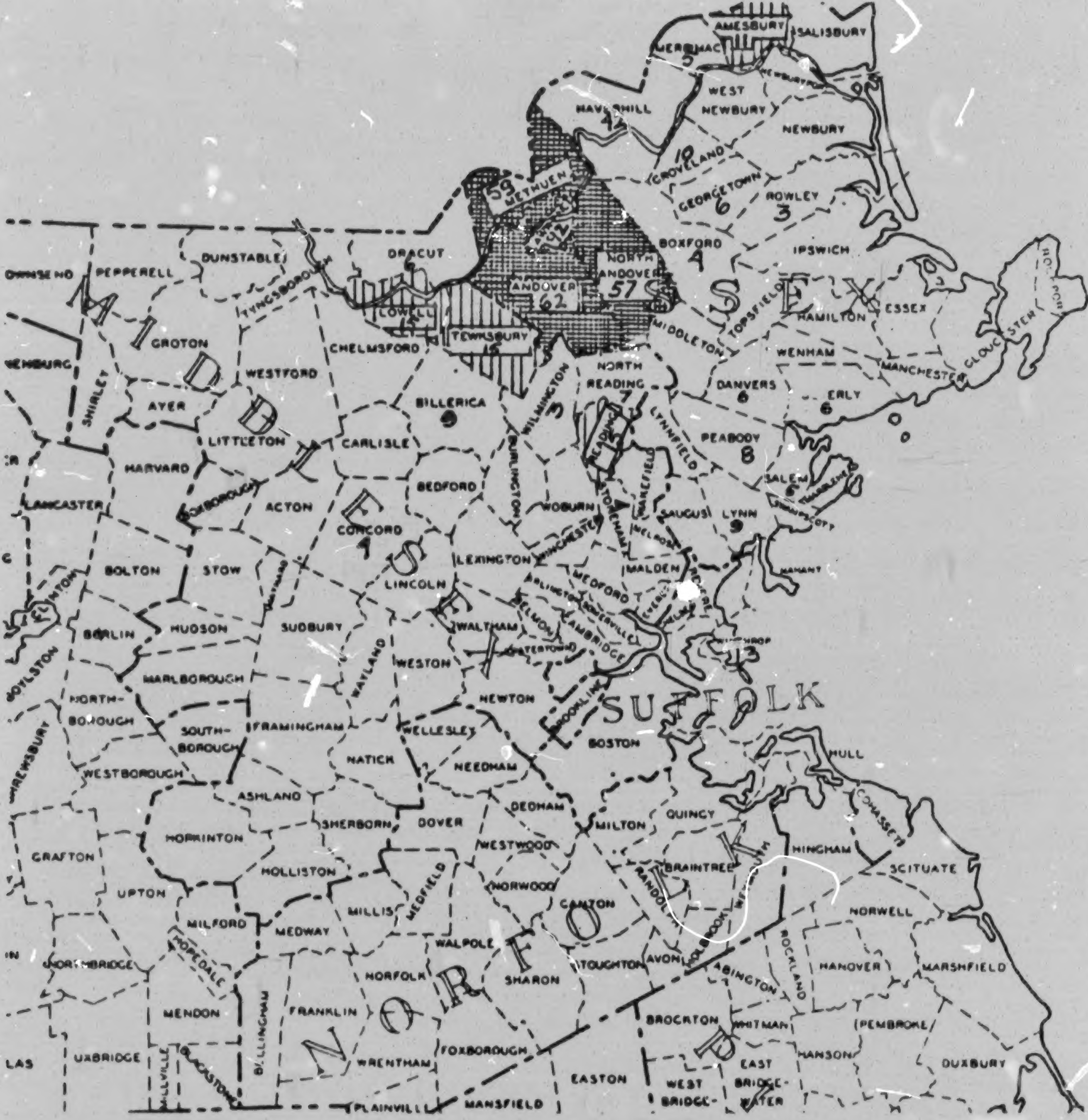
LEGEND

☐ 0-2%

▥ 2-8%

▦ ABOVE 8%

NOTE: TOWNS WITH LESS THAN ELEVEN STUDENTS ARE OMITTED.


AMESBURY
SALISBURY
MERRIMAC 5
WEST NEWBURY
NEWBURY
HAVERHILL 42
GROVELAND 10
GEORGETOWN 6
ROWLEY 3
METHUEN 59
LAWRENCE 42
BOXFORD 4
IPSWICH
NORTH ANDOVER 57
ANDOVER 62
DRACUT 6
LOWELL 15
TEWKSBURY 15
DUNSTABLE
PEPPERELL
TYNGSBOROUGH
TOWNSEND
GROTON
SHIRLEY
WESTFORD
CHELMSFORD
BILLERICA 9
WILMINGTON 3
NORTH READING 7
MIDDLETON
TOPSFIELD
HAMILTON
ESSEX
WENHAM
MANCHESTER
GLOUCESTER
ROCKPORT
DANVERS 6
BEVERLY 6
PEABODY 8
SALEM 6
MARBLEHEAD
SWAMPSCOTT
LYNN 9
SAUGUS
LYNNFIELD
READING
WAKEFIELD
STONEHAM
MELROSE
MALDEN
REVERE
NAHANT
WINTHROP 3
AYER
LITTLETON
CARLISLE
BEDFORD
BURLINGTON
WOBURN
WINCHESTER
LEXINGTON
HARVARD
LANCASTER
BOXBOROUGH
ACTON
CONCORD 4
BOLTON
STOW
MAYNARD
LINCOLN
MEDFORD
ARLINGTON
SOMERVILLE
EVERETT
CHELSEA
CLINTON
BERLIN
HUDSON
SUDBURY
WALTHAM
BELMONT
CAMBRIDGE
WATERTOWN
BOYLSTON
MARLBOROUGH
WAYLAND
WESTON
NEWTON
BROOKLINE
NORTHBOROUGH
SOUTHBOROUGH
FRAMINGHAM
WELLESLEY
BOSTON
HULL
SHREWSBURY
WESTBOROUGH
NATICK
NEEDHAM
ASHLAND
SHERBORN
DOVER
DEDHAM
MILTON
QUINCY
COHASSET
HOPKINTON
WESTWOOD
HINGHAM
SCITUATE
GRAFTON
HOLLISTON
MEDFIELD
NORWOOD
BRAINTREE
WEYMOUTH
RANDOLPH
HOLBROOK
UPTON
MILLIS
CANTON
NORWELL
MILFORD
MEDWAY
WALPOLE
ROCKLAND
HOPEDALE
NORTHBRIDGE
NORFOLK
SHARON
STOUGHTON
AVON
ABINGTON
HANOVER
MARSHFIELD
MENDON
BELLINGHAM
FRANKLIN
BROCKTON
WHITMAN
PEMBROKE
UXBRIDGE
MILLVILLE
BLACKSTONE
WRENTHAM
FOXBOROUGH
EASTON
WEST BRIDGEWATER
EAST BRIDGEWATER
HANSON
DUXBURY
PLAINVILLE
MANSFIELD
MIDDLESEX
ESSEX
SUFFOLK
NORFOLK
PLYMOUTH

RESIDENCE OF STUDENTS ATTENDING EVENING SESSION

MERRIMACK COLLEGE

TOTAL REPORTED: 562

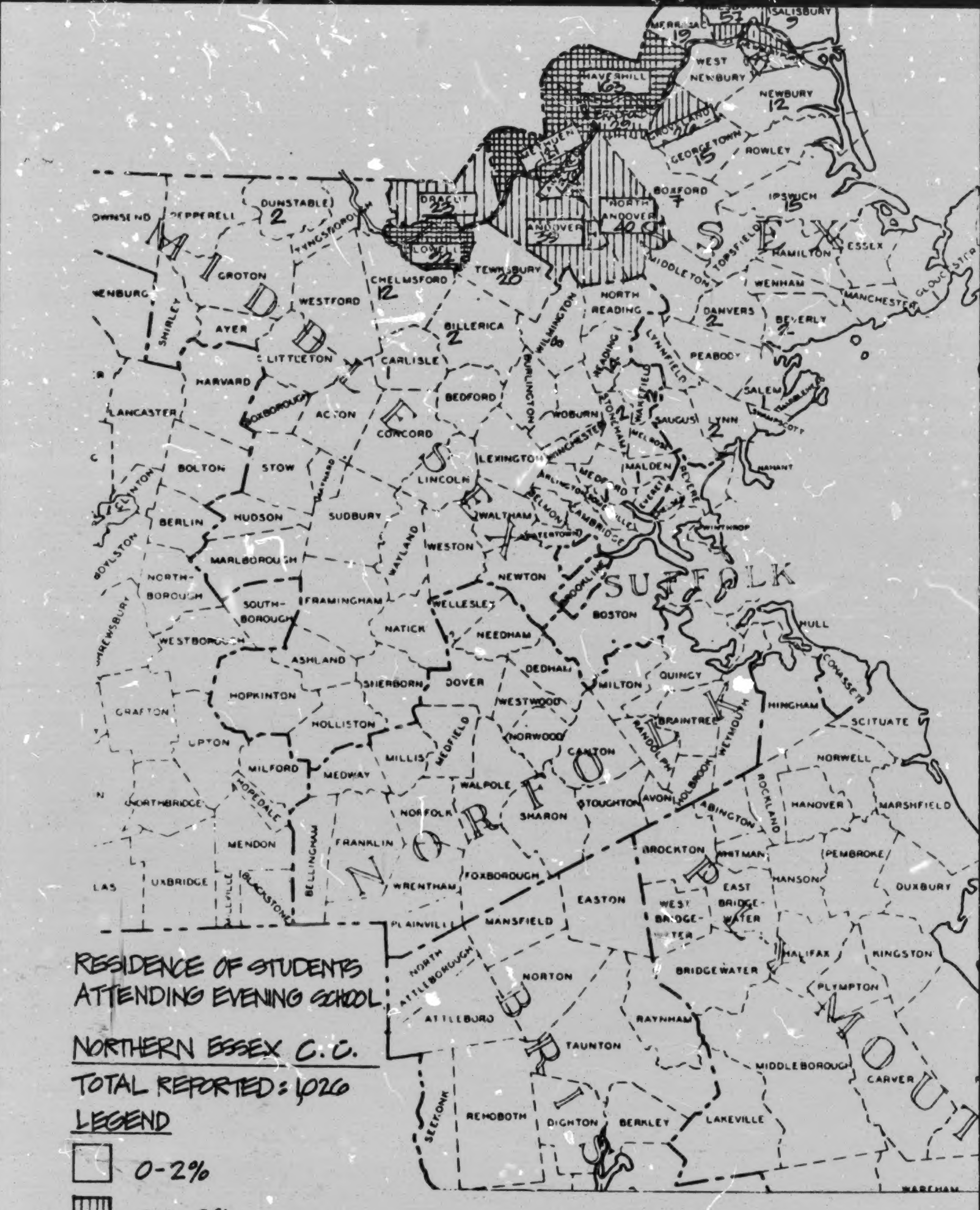
LEGEND

☐ 0-2%

▥ 2-8%

▦ ABOVE 8%

NOTE: TOWNS WITH LESS THAN THREE STUDENTS ARE OMITTED.


SALISBURY
9
57
MERRIMAC
19
HAVERHILL
163
WEST NEWBURY
NEWBURY
12
GROVELAND
METHUEN
GEORGETOWN
15
ROWLEY
BOXFORD
7
IPSWICH
15
NORTH ANDOVER
40
ANDOVER
33
DRACUT
23
LOWELL
TEWKSBURY
20
CHELMSFORD
12
DUNSTABLE
2
TOWNSEND
PEPPERELL
TYNGSBORO
MIDDLESEX
SEX
ESSEX
GROTON
WESTFORD
TOPSFIELD
HAMILTON
MIDDLETON
WENHAM
MANCHESTER
GLOUCESTER
NORTH READING
DANVERS
2
BEVERLY
2
BILLERICA
2
WILMINGTON
8
READING
LYNNFIELD
PEABODY
SALEM
MARBLEHEAD
SWAMPSCOTT
LYNN
2
SAUGUS
WAKEFIELD
STONEHAM
WOBURN
BURLINGTON
CARLISLE
BEDFORD
LITTLETON
AYER
SHIRLEY
HARVARD
LANCASTER
BOXBOROUGH
ACTON
CONCORD
LEXINGTON
WINCHESTER
MELROSE
MALDEN
MEDFORD
EVERETT
REVERE
NAHANT
WINTHROP
LINCOLN
ARLINGTON
BELMONT
CAMBRIDGE
WATERTOWN
WALTHAM
BOLTON
STOW
MAYNARD
HUDSON
BERLIN
CLINTON
BOYLSTON
SUDBURY
WAYLAND
WESTON
NEWTON
BROOKLINE
SUFFOLK
BOSTON
MARLBOROUGH
NORTHBOROUGH
SOUTHBOROUGH
FRAMINGHAM
WELLESLEY
NATICK
NEEDHAM
SHREWSBURY
WESTBOROUGH
ASHLAND
HULL
COHASSET
QUINCY
MILTON
DEDHAM
DOVER
SHERBORN
HOPKINTON
GRAFTON
WESTWOOD
HINGHAM
BRAINTREE
WEYMOUTH
RANDOLPH
SCITUATE
HOLLISTON
UPTON
NORWOOD
CANTON
MEDFIELD
MILLIS
MILFORD
MEDWAY
NORFOLK
WALPOLE
NORWELL
HOLBROOK
ROCKLAND
ABINGTON
AVON
STOUGHTON
SHARON
HOPEDALE
NORTHBRIDGE
MENDON
BELLINGHAM
FRANKLIN
HANOVER
MARSHFIELD
BROCKTON
WHITMAN
PEMBROKE
HANSON
UXBRIDGE
MILLVILLE
BLACKSTONE
WRENTHAM
FOXBOROUGH
EASTON
WEST BRIDGEWATER
EAST BRIDGEWATER
DUXBURY
PLAINVILLE
MANSFIELD
NORTH ATTLEBOROUGH
NORTON
BRIDGEWATER
HALIFAX
KINGSTON
PLYMPTON
ATTLEBORO
RAYNHAM
TAUNTON
MIDDLEBOROUGH
CARVER
SEEKONK
REHOBOTH
DIGHTON
BERKLEY
LAKEVILLE
WAREHAM
BRISTOL
PLYMOUTH

RESIDENCE OF STUDENTS
ATTENDING EVENING SCHOOL

NORTHERN ESSEX C.C.

TOTAL REPORTED: 1026

LEGEND

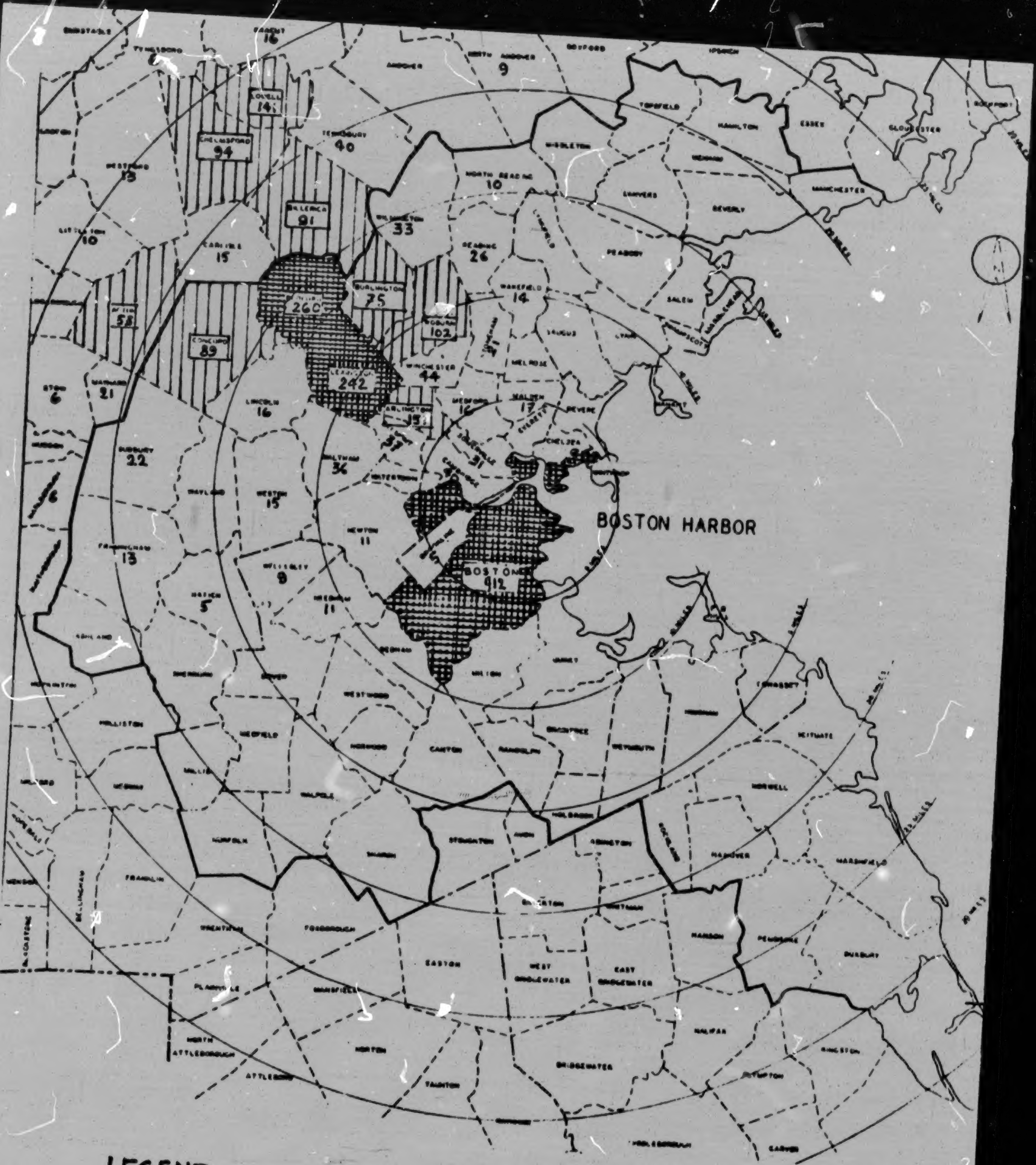
☐ 0-2%

▥ 2%-8%

▦ ABOVE 8%

NOTE: TOWNS WITH LESS THAN 4 STUDENTS ARE OMITTED.

BURLINGTON/BEDFORD
GEOGRAPHIC SERVICE AREA
(Northeast Region)



DUNSTABLE
TYNGSBORO
6
DRACUT
16
ANDOVER
NORTH ANDOVER
9
BOXFORD
IPSWICH
LOWELL
141
CHELMSFORD
94
TEWKSBURY
40
TOPSFIELD
HAMILTON
ESSEX
ROCKPORT
GLOUCESTER
WESTFORD
13
MIDDLETON
NORTH READING
10
DANVERS
BEVERLY
MANCHESTER
BILLERICA
91
WILMINGTON
33
LITTLETON
10
CARLISLE
15
READING
26
PEABODY
SALEM
260
BURLINGTON
75
WAKEFIELD
14
WOBURN
102
58
CONCORD
89
LYNN
SAUGUS
MELROSE
WINCHESTER
44
LEXINGTON
242
STOW
6
MAYNARD
21
LINCOLN
16
ARLINGTON
151
MEDFORD
12
MALDEN
17
REVERE
CHELSEA
EVERETT
SOMERVILLE
31
CAMBRIDGE
37
WALTHAM
36
WATERTOWN
SUDBURY
22
WAYLAND
WESTON
15
6
BOSTON HARBOR
NEWTON
11
FRAMINGHAM
13
WELLESLEY
9
BOSTON
912
NATICK
5
NEEDHAM
11
ASHLAND
DEDHAM
MILTON
QUINCY
COHASSET
HOPKINTON
SHERBORN
DOVER
WESTWOOD
HINGHAM
SCITUATE
HOLLISTON
MEDFIELD
NORWOOD
CANTON
RANDOLPH
BRAINTREE
WEYMOUTH
MILLIS
MEDWAY
WALPOLE
NORWELL
MILFORD
HOLBROOK
ABINGTON
NORFOLK
SHARON
STOUGHTON
AVON
HANOVER
MARSHFIELD
FRANKLIN
BELLINGHAM
MENDON
BROCKTON
WHITMAN
HANSON
PEMBROKE
DUXBURY
WRENTHAM
FOXBOROUGH
PLAINVILLE
MANSFIELD
EASTON
WEST BRIDGEWATER
EAST BRIDGEWATER
NORTH ATTLEBOROUGH
NORTON
HALIFAX
KINGSTON
ATTLEBORO
TAUNTON
BRIDGEWATER
PLYMPTON
MIDDLEBOROUGH
CARVER

LEGEND

☐ 0-2%

▥ 2-8%

▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING CONTINUING EDUCATION

MIDDLESEX COMMUNITY COLLEGE

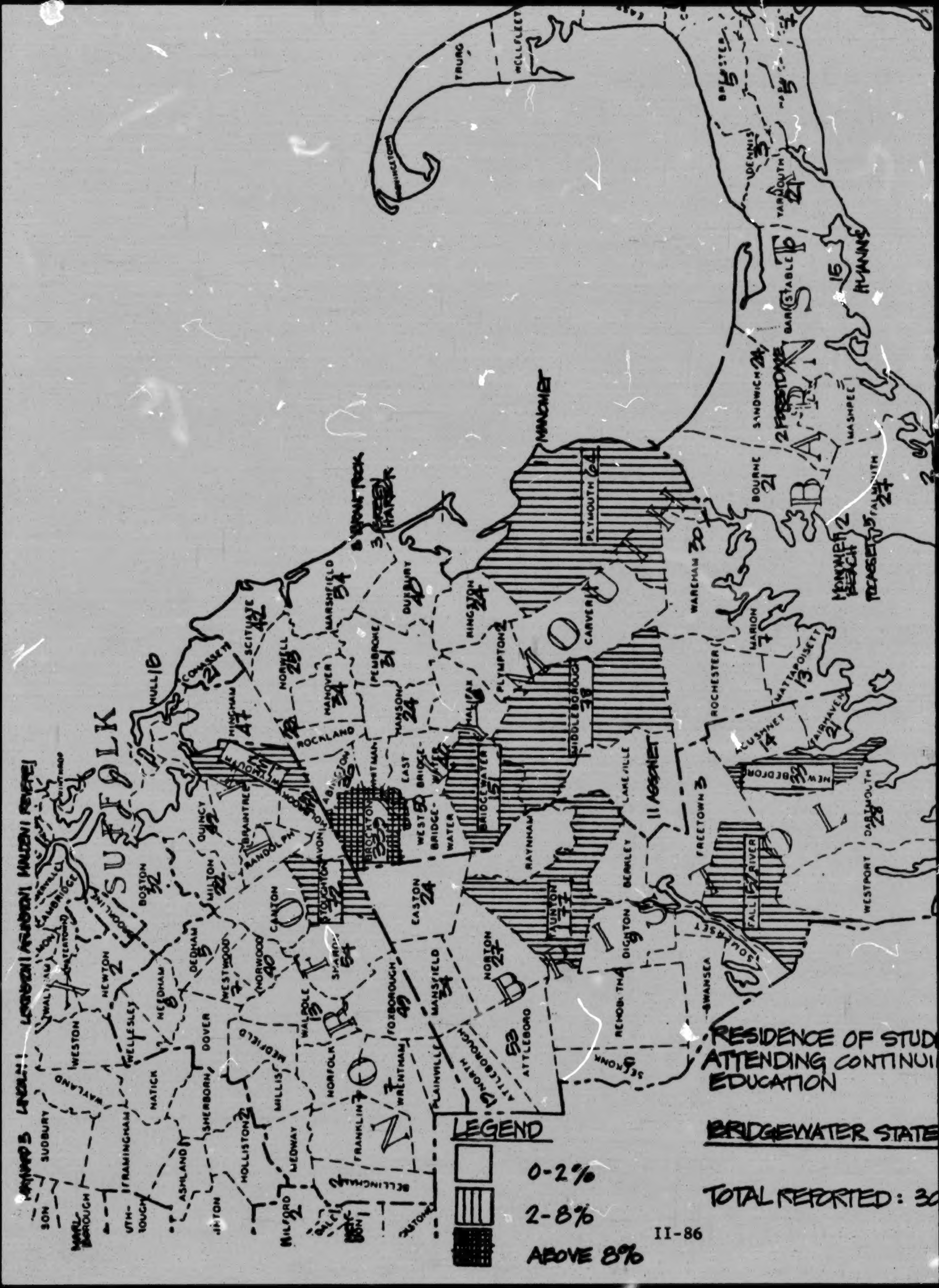
TOTAL REPORTED: 2,432

NOTE: TOWNS WITH LESS THAN FIVE STUDENTS ARE OMITTED.

BROCKTON

GEOGRAPHIC SERVICE AREA

(Southeast Region)

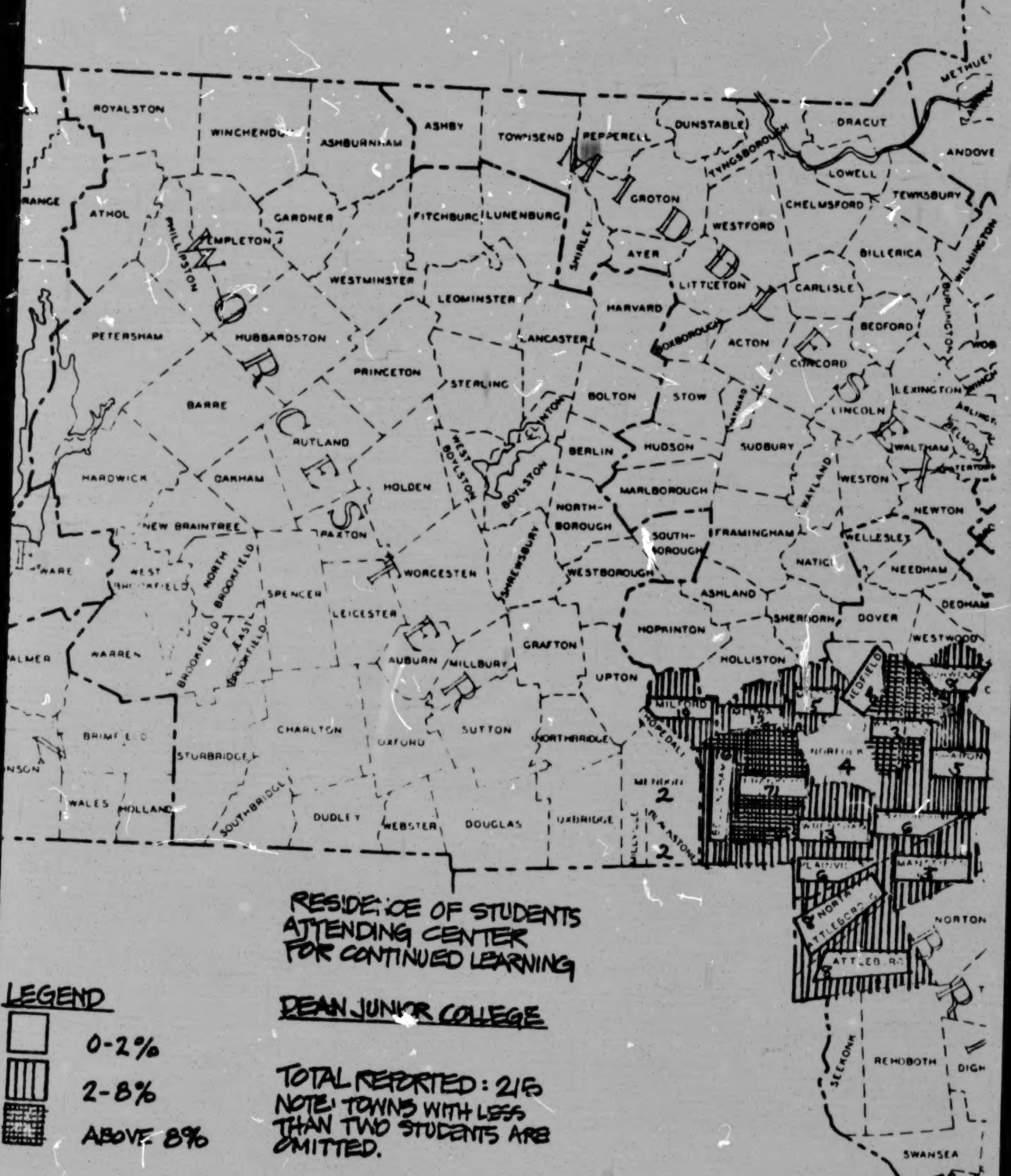

LEGEND
0-2%
2-8%
ABOVE 8%
SUFFOLK
NORFOLK
PLYMOUTH
BRISTOL
BARNSTABLE
TRURO
WELLFLEET
PROVINCETOWN
BREWSTER
DENNIS 3
YARMOUTH
BARNSTABLE 16
HYANNIS 15
SANDWICH 24
MASHPEE
BOURNE 21
FALMOUTH 27
WAREHAM 30
MANOMET
PLYMOUTH 64
KINGSTON 24
PLYMPTON 2
CARVER
DUXBURY
MARSHFIELD 54
PEMBROKE 31
HANOVER 34
NORWELL 28
SCITUATE
COHASSET 12
HULL 10
HINGHAM 47
ROCKLAND
HANSON 24
HALIFAX
MIDDLEBOROUGH 38
WHITMAN
ABINGTON
EAST BRIDGEWATER
WEST BRIDGEWATER
BRIDGEWATER 151
BROCKTON
AVON
STOUGHTON
RANDOLPH
BRAINTREE
WEYMOUTH
QUINCY
MILTON
BOSTON
BROOKLINE
CAMBRIDGE
WATERTOWN
WALTHAM
NEWTON 2
WELLESLEY
NEEDHAM
DEDHAM 5
WESTWOOD
NORWOOD 40
CANTON
SHARON 54
EASTON 24
NORTON 27
MANSFIELD 34
FOXBOROUGH 49
WALPOLE 13
MEDFIELD
DOVER
WESTON
WAYLAND
SUDBURY
NATICK
FRAMINGHAM
SHERBORN
HOLLISTON 2
MILLIS
MEDWAY
NORFOLK
FRANKLIN
WRENTHAM
PLAINVILLE
NORTH ATTLEBOROUGH
ATTLEBORO 53
ASHLAND
MILFORD 2
BELLINGHAM
RAYNHAM
TAUNTON
LAKEVILLE
ASSONET
FREETOWN 3
BERKLEY
DIGHTON
REHOBOTH
SEEKONK
SWANSEA
SOMERSET
FALL RIVER
WESTPORT
DARTMOUTH 28
NEW BEDFORD
ACUSHNET 14
FAIRHAVEN 21
MATTAPOISETT 13
MARION 7
ROCHESTER
GREEN HARBOR
BRANT ROCK
WINTHROP
REVERE
MALDEN
ARLINGTON
LEXINGTON
LINCOLN
MAYNARD
MARLBOROUGH
HUDSON
SOUTHBOROUGH
HOPKINTON

RESIDENCE OF STUD
ATTENDING CONTINUI
EDUCATION

BRIDGEWATER STATE

TOTAL REPORTED: 30

BEST COPY AVAILABLE


ROYALSTON
WINCHENDON
ASHBURNHAM
ASHBY
TOWNSEND
PEPPERELL
DUNSTABLE
TYNGSBOROUGH
DRACUT
METHUEN
LOWELL
ANDOVER
TEWKSBURY
ORANGE
ATHOL
TEMPLETON
GARDNER
FITCHBURG
LUNENBURG
GROTON
WESTFORD
CHELMSFORD
BILLERICA
WILMINGTON
PHILLIPSTON
SHIRLEY
AYER
LITTLETON
CARLISLE
BURLINGTON
WESTMINSTER
LEOMINSTER
HARVARD
BEDFORD
PETERSHAM
HUBBARDSTON
LANCASTER
BOXBOROUGH
ACTON
CONCORD
PRINCETON
STERLING
BOLTON
STOW
MAYNARD
LEXINGTON
LINCOLN
BARRE
CLINTON
RUTLAND
BERLIN
HUDSON
SUDBURY
WALTHAM
BELMONT
HARDWICK
OAKHAM
HOLDEN
WEST BOYLSTON
BOYLSTON
MARLBOROUGH
WAYLAND
WESTON
NEWTON
NORTHBOROUGH
NEW BRAINTREE
PAXTON
SOUTHBOROUGH
FRAMINGHAM
WELLESLEY
WARE
WEST BROOKFIELD
NORTH BROOKFIELD
WORCESTER
SHREWSBURY
WESTBOROUGH
NATICK
NEEDHAM
SPENCER
LEICESTER
ASHLAND
SHERBORN
DOVER
DEDHAM
HOPKINTON
WESTWOOD
PALMER
WARREN
BROOKFIELD
EAST BROOKFIELD
AUBURN
MILLBURY
GRAFTON
HOLLISTON
UPTON
MEDFIELD
NORWOOD
MILFORD
9
MEDWAY
13
5
4
CHARLTON
OXFORD
SUTTON
NORTHBRIDGE
HOPEDALE
NORFOLK
4
3
SHARON
5
BRIMFIELD
STURBRIDGE
MONSON
MENDON
2
WALES
HOLLAND
SOUTHBRIDGE
DUDLEY
WEBSTER
DOUGLAS
UXBRIDGE
MILLVILLE
BLACKSTONE
2
7
WRENTHAM
13
6
PLAINVILLE
6
MANSFIELD
3
NORTH ATTLEBOROUGH
8
ATTLEBORO
NORTON
SEEKONK
REHOBOTH
DIGHTON
SWANSEA
MIDDLESEX
WORCESTER

RESIDENCE OF STUDENTS
ATTENDING CENTER
FOR CONTINUED LEARNING

DEAN JUNIOR COLLEGE

LEGEND

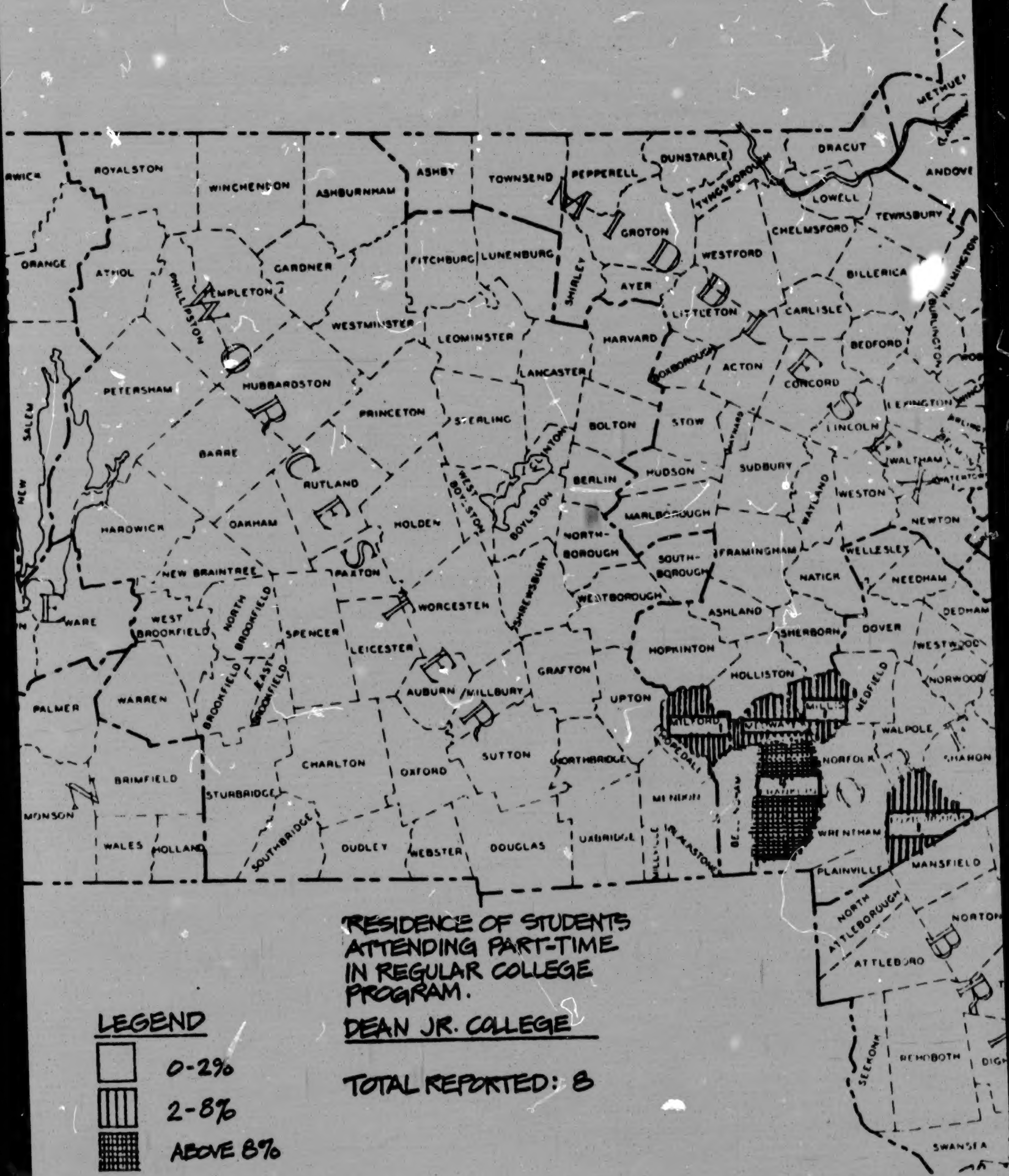
☐ 0-2%

▥ 2-8%

▦ ABOVE 8%

TOTAL REPORTED: 215

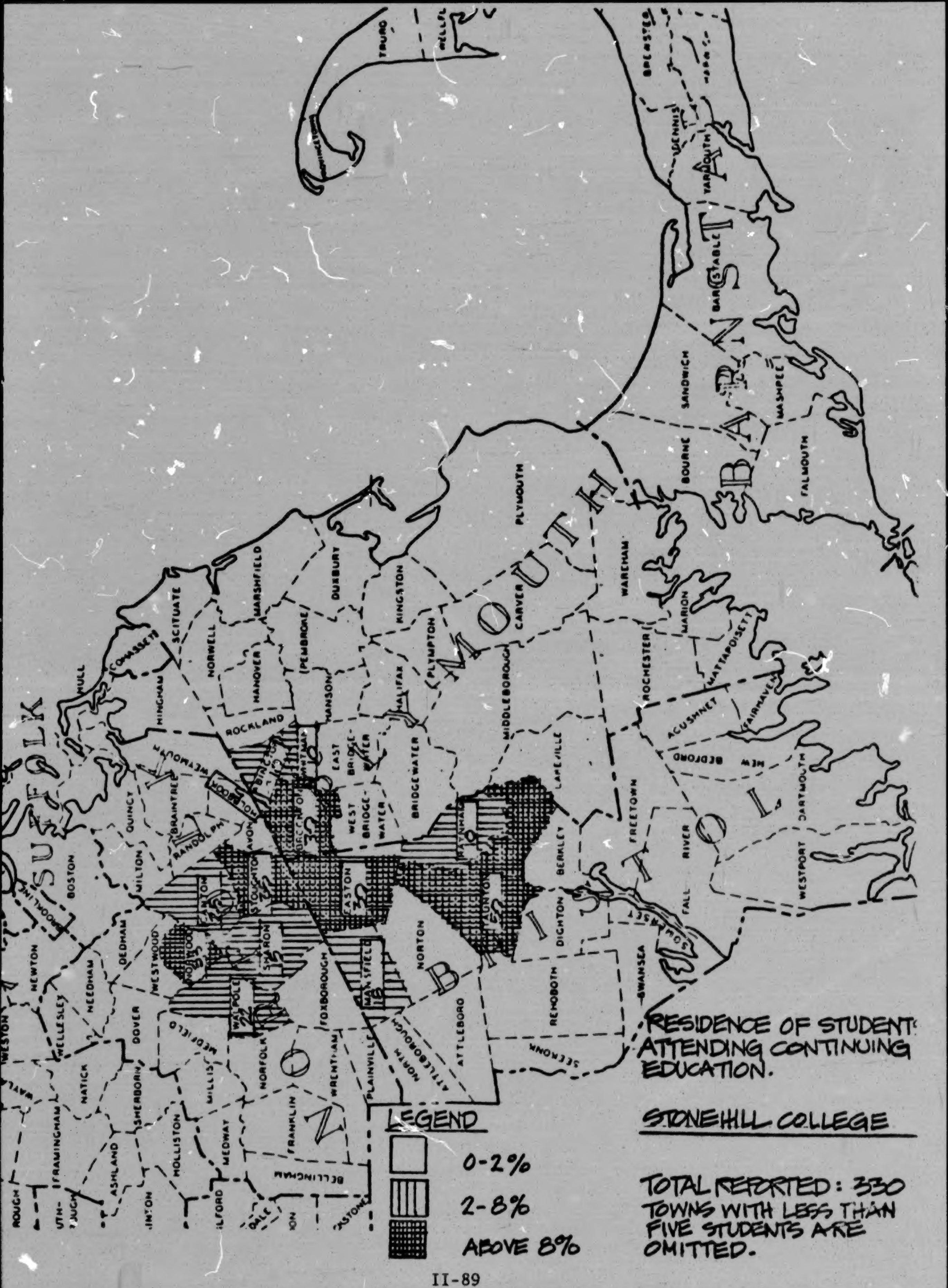
NOTE: TOWNS WITH LESS THAN TWO STUDENTS ARE OMITTED.


WORCESTER
MIDDLESEX
ROYALSTON
WINCHENDON
ASHBURNHAM
ASHBY
TOWNSEND
PEPPERELL
DUNSTABLE
TYNGSBOROUGH
DRACUT
METHUEN
ANDOVER
LOWELL
TEWKSBURY
ORANGE
ATHOL
PHILLIPSTON
TEMPLETON
GARDNER
FITCHBURG
LUNENBURG
SHIRLEY
GROTON
WESTFORD
CHELMSFORD
BILLERICA
WILMINGTON
AYER
LITTLETON
CARLISLE
BURLINGTON
WESTMINSTER
LEOMINSTER
HARVARD
BOXBOROUGH
ACTON
BEDFORD
PETERSHAM
HUBBARDSTON
LANCASTER
CONCORD
LEXINGTON
PRINCETON
STERLING
CLINTON
BOLTON
STOW
MAYNARD
LINCOLN
NEW SALEM
BARRE
RUTLAND
WEST BOYLSTON
BERLIN
HUDSON
SUDBURY
WALTHAM
WATERTOWN
WAYLAND
WESTON
HARDWICK
OAKHAM
HOLDEN
BOYLSTON
MARLBOROUGH
NEWTON
NORTHBOROUGH
SOUTHBOROUGH
FRAMINGHAM
WELLESLEY
NEW BRAINTREE
PAXTON
NATICK
NEEDHAM
SHREWSBURY
WESTBOROUGH
WARE
WEST BROOKFIELD
NORTH BROOKFIELD
SPENCER
WORCESTER
ASHLAND
DEDHAM
LEICESTER
SHERBORN
DOVER
HOPKINTON
WESTWOOD
GRAFTON
HOLLISTON
AUBURN
MILLBURY
MEDFIELD
NORWOOD
PALMER
WARREN
BROOKFIELD
EAST BROOKFIELD
UPTON
MILFORD
MEDWAY
MILLIS
WALPOLE
SHARON
CHARLTON
OXFORD
SUTTON
NORTHBRIDGE
HOPEDALE
NORFOLK
BRIMFIELD
STURBRIDGE
MENDON
FRANKLIN
MONSON
WRENTHAM
FOXBOROUGH
SOUTHBRIDGE
BELLINGHAM
WALES
HOLLAND
DUDLEY
WEBSTER
DOUGLAS
UXBRIDGE
MILLVILLE
BLACKSTONE
PLAINVILLE
MANSFIELD
NORTH ATTLEBOROUGH
NORTON
ATTLEBORO
SEEKONK
REHOBOTH
SWANSEA
LEGEND
☐ 0-2%
▥ 2-8%
▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING PART-TIME IN REGULAR COLLEGE PROGRAM.

DEAN JR. COLLEGE

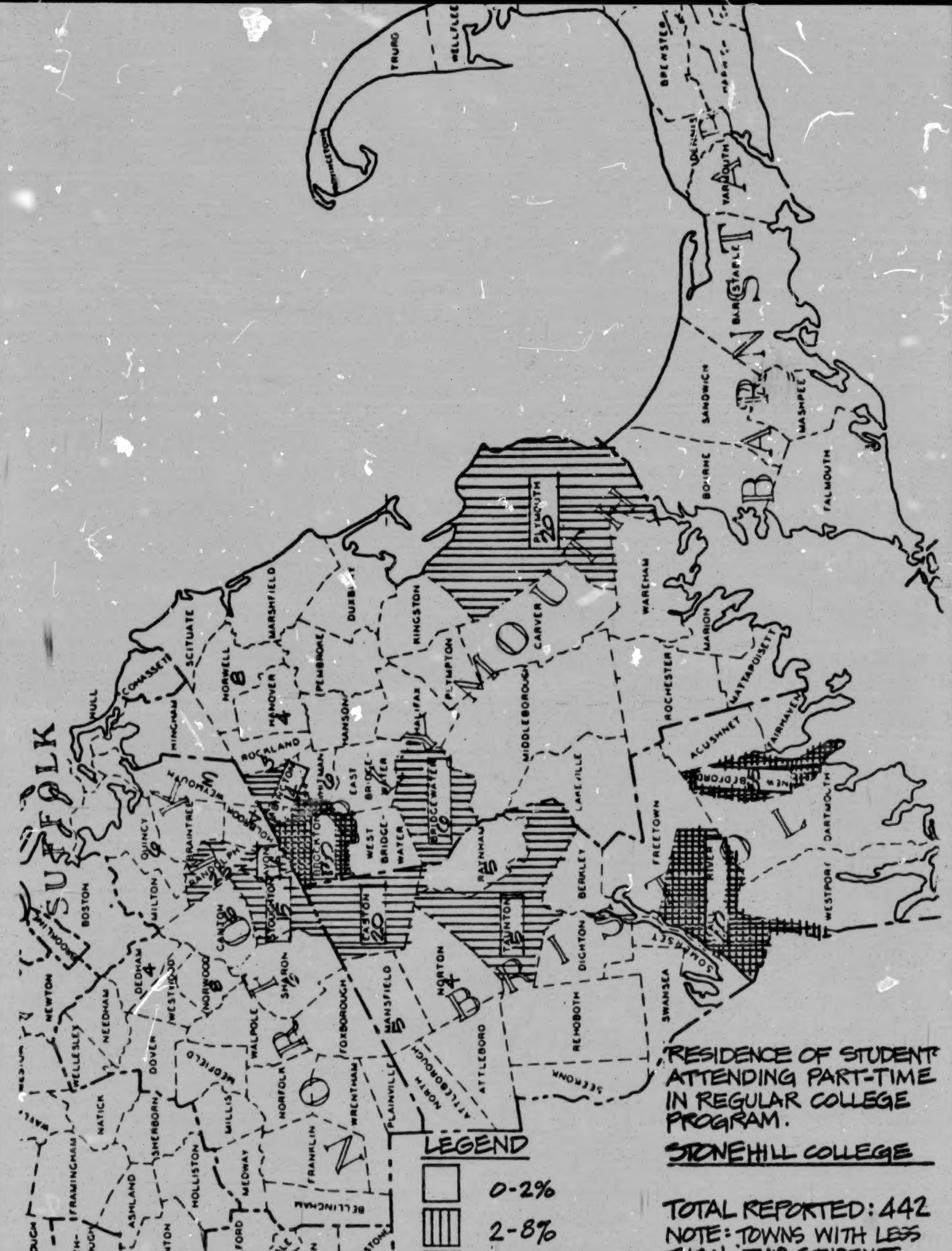
TOTAL REPORTED: 8


SUFFOLK
NORFOLK
PLYMOUTH
BARNSTABLE
BRISTOL
TRURO
WELLFLEET
PROVINCETOWN
BREWSTER
DENNIS
YARMOUTH
BARNSTABLE
SANDWICH
MASHPEE
BOURNE
FALMOUTH
PLYMOUTH
WAREHAM
MARION
MATTAPOISETT
ROCHESTER
CARVER
KINGSTON
DUXBURY
MARSHFIELD
PEMBROKE
PLYMPTON
HALIFAX
SCITUATE
COHASSET
NORWELL
HANOVER
HANSON
HULL
HINGHAM
ROCKLAND
WHITMAN
EAST BRIDGEWATER
WEST BRIDGEWATER
BRIDGEWATER
MIDDLEBOROUGH
LAKEVILLE
ACUSHNET
FAIRHAVEN
NEW BEDFORD
DARTMOUTH
WESTPORT
FREETOWN
FALL RIVER
SOMERSET
SWANSEA
BERKLEY
DIGHTON
TAUNTON
RAYNHAM
EASTON
NORTON
REHOBOTH
SEEKONK
ATTLEBORO
NORTH ATTLEBOROUGH
MANSFIELD
FOXBOROUGH
PLAINVILLE
WRENTHAM
NORFOLK
FRANKLIN
BELLINGHAM
MEDWAY
MILLIS
MEDFIELD
WALPOLE
SHARON
STOUGHTON
AVON
BROCKTON
HOLBROOK
RANDOLPH
BRAINTREE
WEYMOUTH
QUINCY
MILTON
BOSTON
BROOKLINE
DEDHAM
WESTWOOD
NORWOOD
CANTON
NEEDHAM
NEWTON
WELLESLEY
DOVER
SHERBORN
NATICK
FRAMINGHAM
ASHLAND
HOLLISTON
LEGEND
0-2%
2-8%
ABOVE 8%

RESIDENCE OF STUDENT
ATTENDING CONTINUING
EDUCATION.

STONEHILL COLLEGE

TOTAL REPORTED: 330
TOWNS WITH LESS THAN
FIVE STUDENTS ARE
OMITTED.


SUFFOLK
NORFOLK
PLYMOUTH
BRISTOL
BARNSTABLE
PLYMOUTH 20
EASTON 20
TAUNTON 15
STOUGHTON 15
BROCKTON
BRIDGEWATER 6
WEST BRIDGEWATER
EAST BRIDGEWATER
RAYNHAM 5
NORWELL 8
HANOVER 4
ROCKLAND
WHITMAN 6
ABINGTON
HOLBROOK
AVON
RANDOLPH
BRAINTREE
WEYMOUTH
QUINCY 6
MILTON
CANTON
NORWOOD 8
DEDHAM 4
WESTWOOD
SHARON 5
MANSFIELD 5
NORTON 4
FALL RIVER
NEW BEDFORD
HINGHAM
HULL
COHASSET
SCITUATE
MARSHFIELD
DUXBURY
PEMBROKE
HANSON
KINGSTON
HALIFAX
PLYMPTON
CARVER
MIDDLEBOROUGH
LAKEVILLE
BERKLEY
DIGHTON
REHOBOTH
SEEKONK
SWANSEA
SOMERSET
FREETOWN
WESTPORT
DARTMOUTH
ACUSHNET
FAIRHAVEN
MATTAPOISETT
ROCHESTER
MARION
WAREHAM
BOURNE
FALMOUTH
MASHPEE
SANDWICH
BARNSTABLE
YARMOUTH
DENNIS
BREWSTER
WELLFLEET
TRURO
PROVINCETOWN
BOSTON
BROOKLINE
NEWTON
WELLESLEY
NEEDHAM
DOVER
NATICK
FRAMINGHAM
ASHLAND
SHERBORN
HOLLISTON
MEDFIELD
MILLIS
MEDWAY
NORFOLK
WALPOLE
FOXBOROUGH
WRENTHAM
FRANKLIN
PLAINVILLE
NORTH ATTLEBOROUGH
ATTLEBORO
BELLINGHAM
TAUNTON

RESIDENCE OF STUDENTS ATTENDING PART-TIME IN REGULAR COLLEGE PROGRAM.

STONEHILL COLLEGE

LEGEND

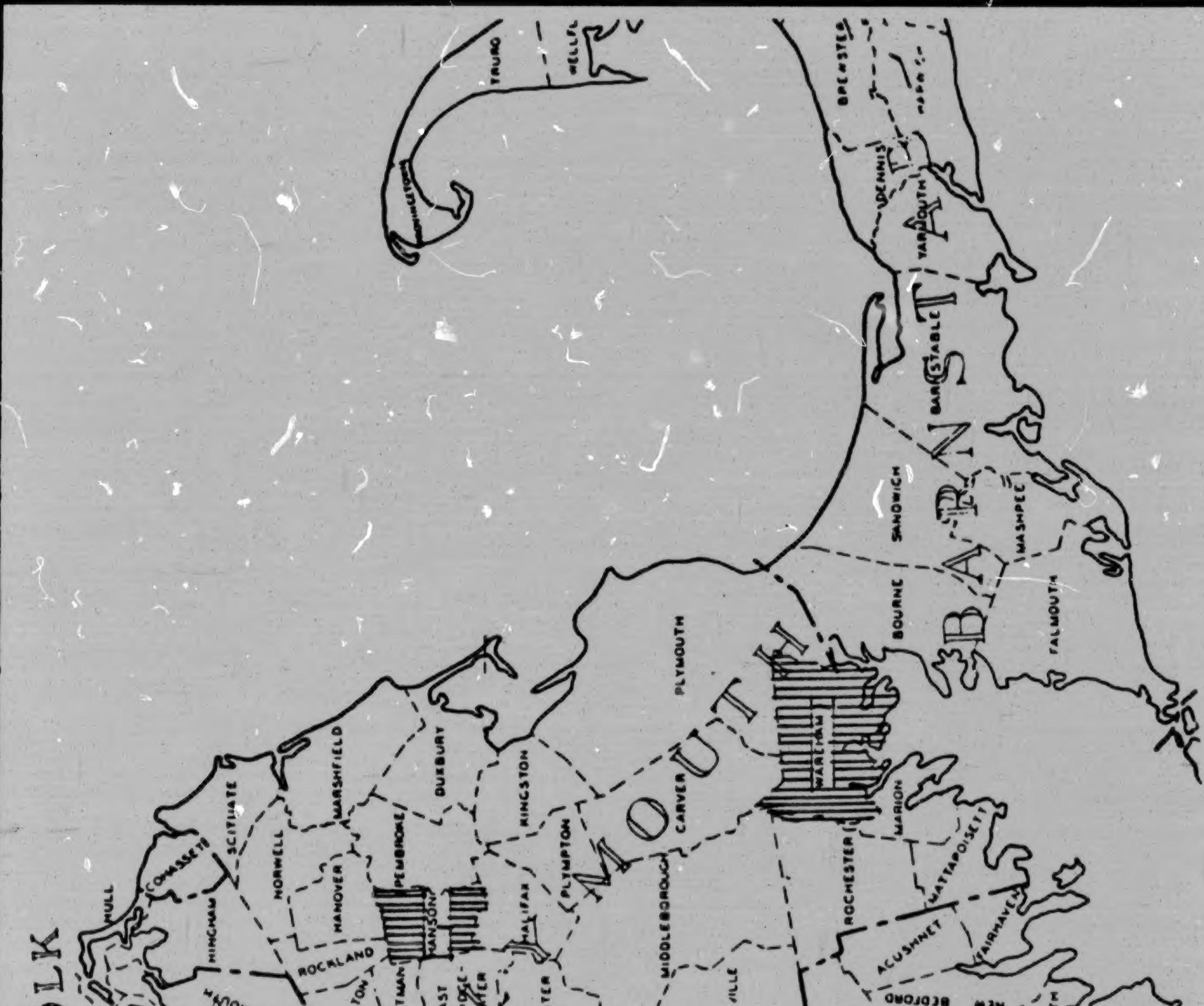
☐ 0-2%

▥ 2-8%

▦ ABOVE 8%

TOTAL REPORTED: 442

NOTE: TOWNS WITH LESS THAN TWO STUDENTS ARE OMITTED.

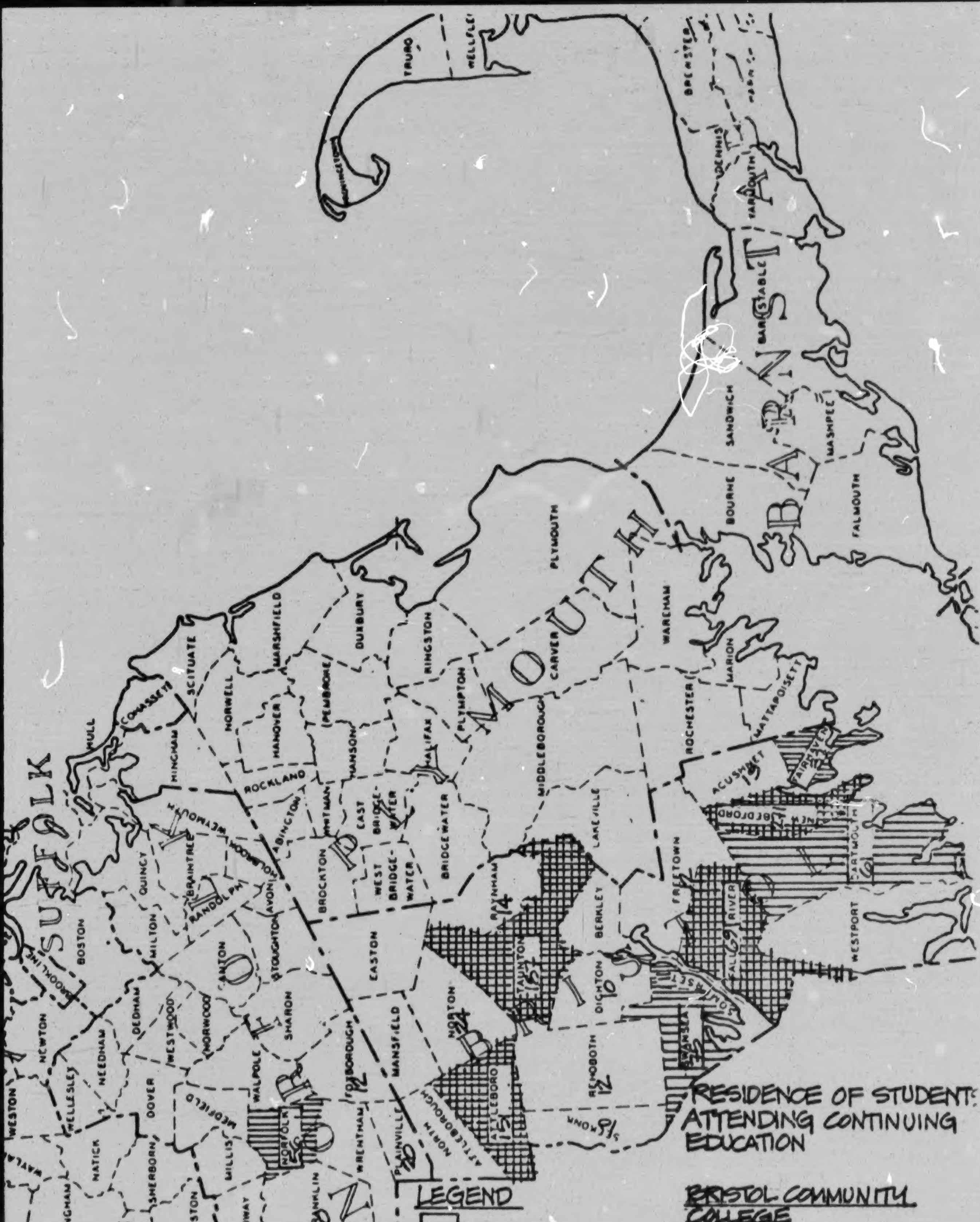

SUFFOLK
NORFOLK
PLYMOUTH
BARNSTABLE
BRISTOL
TRURO
WELLFLEET
PROVINCETOWN
BREWSTER
HARWICH
DENNIS
YARMOUTH
BARNSTABLE
SANDWICH
MASHPEE
BOURNE
FALMOUTH
PLYMOUTH
WAREHAM
MARION
MATTAPOISETT
ROCHESTER
CARVER
KINGSTON
DUXBURY
MARSHFIELD
SCITUATE
COHASSET
HULL
HINGHAM
NORWELL
HANOVER
PEMBROKE
HANSON
HALIFAX
PLYMPTON
MIDDLEBOROUGH
ROCKLAND
WEYMOUTH
ABINGTON
WHITMAN
EAST BRIDGEWATER
BRIDGEWATER
WEST BRIDGEWATER
BROCKTON
LAKEVILLE
ACUSHNET
FAIRHAVEN
NEW BEDFORD
DARTMOUTH
WESTPORT
FREETOWN
FALL RIVER
BERKLEY
RAYNHAM
TAUNTON
DIGHTON
SOMERSET
SWANSEA
REHOBOTH
SEEKONK
NORTON
EASTON
STOUGHTON
AVON
HOLBROOK
RANDOLPH
BRAINTREE
QUINCY
MILTON
CANTON
SHARON
FOXBOROUGH
MANSFIELD
ATTLEBORO
NORTH ATTLEBOROUGH
PLAINVILLE
WRENTHAM
FRANKLIN
NORFOLK
WALPOLE
NORWOOD
WESTWOOD
DEDHAM
BOSTON
BROOKLINE
NEWTON
NEEDHAM
WELLESLEY
WESTON
DOVER
MEDFIELD
MILLIS
SHERBORN
NATICK
FRAMINGHAM
HOLLISTON
MEDWAY
ASHLAND
BELLINGHAM
LEGEND
0-2%
2-8%
ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING PART-TIME IN REGULAR COLLEGE PROGRAM.

WHEATON COLLEGE

TOTAL REPORTED: 22

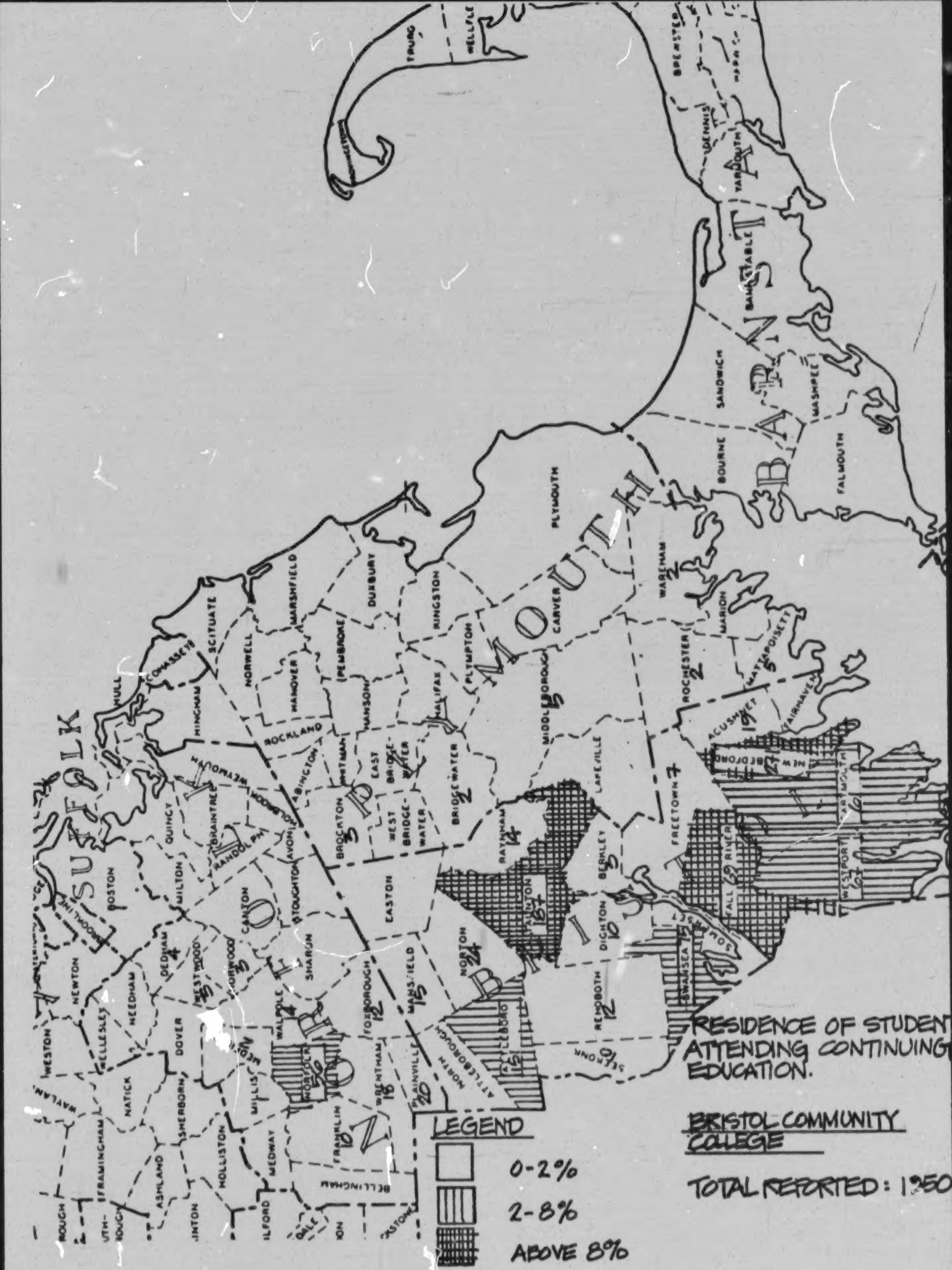
FALL RIVER/NEW BEDFORD
GEOGRAPHIC SERVICE AREA
(Southeast Region)


SUFFOLK
NORFOLK
PLYMOUTH
BRISTOL
BARNSTABLE
BOSTON
BROOKLINE
NEWTON
WESTON
WELLESLEY
NEEDHAM
DEDHAM
MILTON
QUINCY
BRAINTREE
RANDOLPH
WEYMOUTH
HOLBROOK
HULL
COHASSET
HINGHAM
SCITUATE
NORWELL
MARSHFIELD
ROCKLAND
HANOVER
PEMBROKE
DUXBURY
KINGSTON
PLYMPTON
HALIFAX
HANSON
WHITMAN
ABINGTON
AVON
BROCKTON
EAST BRIDGEWATER
WEST BRIDGEWATER
BRIDGEWATER
STOUGHTON
CANTON
WESTWOOD
NORWOOD
SHARON
EASTON
WALPOLE
FOXBOROUGH 12
MANSFIELD
NORTON 34
ATTLEBORO 151
NORTH ATTLEBOROUGH
PLAINVILLE 10
WRENTHAM
NORFOLK 26
FRANKLIN 12
MEDFIELD
MILLIS
MEDWAY
DOVER
SHERBORN
NATICK
FRAMINGHAM
WAYLAND
ASHLAND
HOLLISTON
BELLINGHAM
RAYNHAM 14
TAUNTON 151
BERKLEY
DIGHTON 10
REHOBOTH 12
SEEKONK 16
SWANSEA
SOMERSET
FALL RIVER
FREETOWN
LAKEVILLE
MIDDLEBOROUGH
CARVER
PLYMOUTH
WAREHAM
ROCHESTER
MARION
MATTAPOISETT
ACUSHNET 13
FAIRHAVEN
NEW BEDFORD
DARTMOUTH 61
WESTPORT
BOURNE
SANDWICH
MASHPEE
FALMOUTH
BARNSTABLE
YARMOUTH
DENNIS
BREWSTER
HARWICH
WELLFLEET
TRURO
PROVINCETOWN
LEGEND
0-2%
2-8%
ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING CONTINUING EDUCATION

BRISTOL COMMUNITY COLLEGE

TOTAL REPORTED: 1842
NOTE: TOWNS WITH LESS THAN NINE STUDENTS ARE OMITTED.


SUFFOLK
NORFOLK
PLYMOUTH
BRISTOL
BARNSTABLE
TRURO
WELLFLEET
BREWSTER
HARWICH
DENNIS
YARMOUTH
BARNSTABLE
SANDWICH
MASHPEE
BOURNE
FALMOUTH
PLYMOUTH
WAREHAM 2
MARION
MATTAPOISETT 5
ROCHESTER 2
CARVER
KINGSTON
DUXBURY
MARSHFIELD
SCITUATE
COHASSET
HULL
HINGHAM
NORWELL
HANOVER
PEMBROKE
HANSON
PLYMPTON
HALIFAX
MIDDLEBOROUGH 5
LAKEVILLE
ACUSHNET 19
FAIRHAVEN
NEW BEDFORD
DARTMOUTH 61
WESTPORT 67
FALL RIVER 69
FREETOWN 7
BERKLEY 5
DIGHTON 10
SOMERSET
SWANSEA
REHOBOTH 12
SEEKONK 10
TAUNTON 184
RAYNHAM 14
NORTON 24
ATTLEBORO 15
NORTH ATTLEBOROUGH
PLAINVILLE 20
MANSFIELD 15
EASTON
BRIDGEWATER 2
WEST BRIDGEWATER
EAST BRIDGEWATER
WHITMAN
BROCKTON 3
ABINGTON
ROCKLAND
WEYMOUTH
BRAINTREE
RANDOLPH
AVON
STOUGHTON
HOLBROOK
QUINCY
MILTON
BOSTON
BROOKLINE
CANTON
SHARON
NORWOOD 3
WESTWOOD 3
DEDHAM 4
NEEDHAM
NEWTON
WELLESLEY
WESTON
WAYLAND
NATICK
DOVER
SHERBORN
MEDFIELD
MILLIS
WALPOLE 4
FOXBOROUGH 12
WRENTHAM 18
NORFOLK
FRANKLIN 10
MEDWAY
HOLLISTON
ASHLAND
FRAMINGHAM
BELLINGHAM
MILFORD

RESIDENCE OF STUDENTS ATTENDING CONTINUING EDUCATION.

BRISTOL COMMUNITY COLLEGE

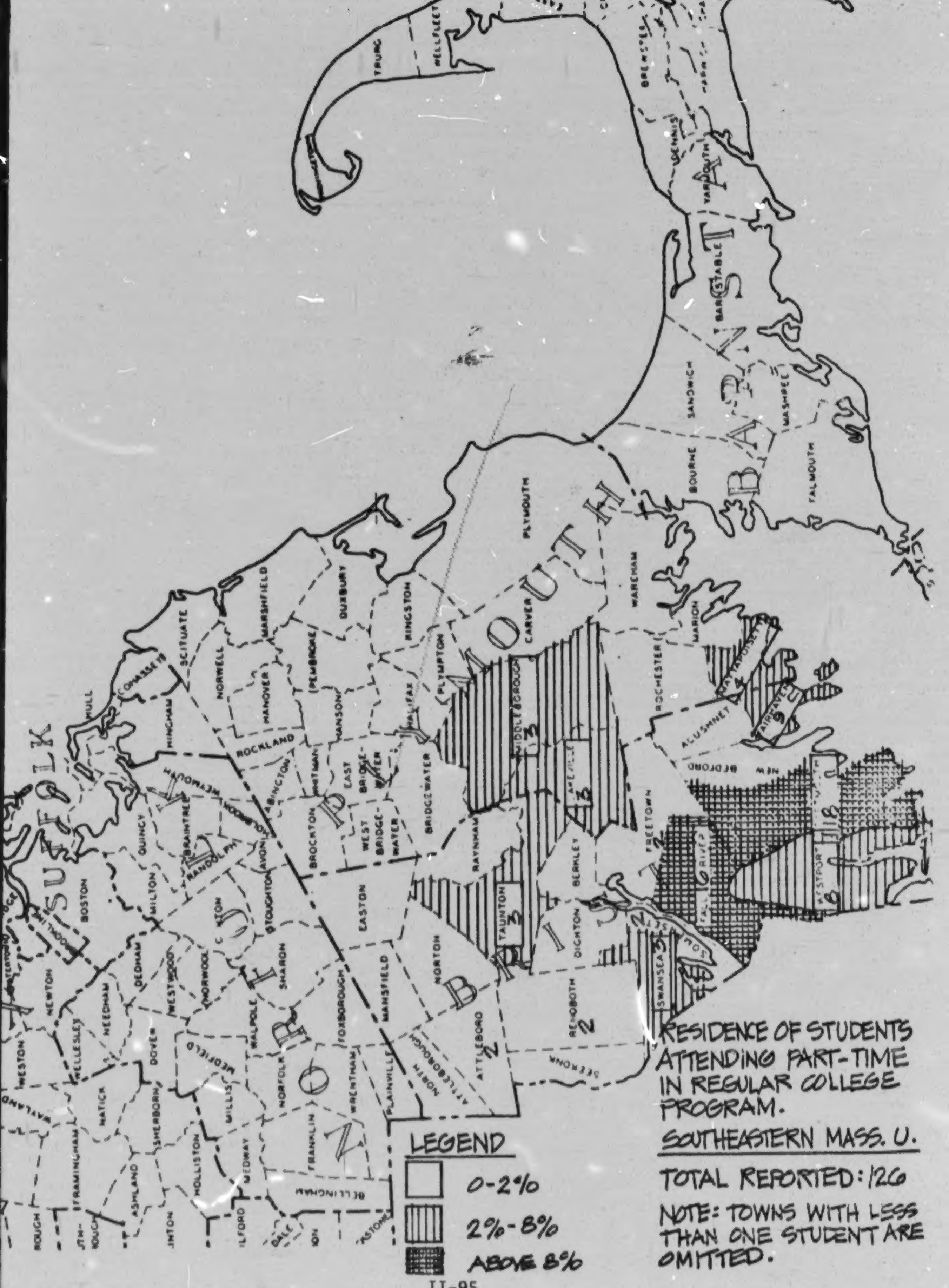
TOTAL REPORTED: 1350

LEGEND

☐ 0-2%

▥ 2-8%

▦ ABOVE 8%


LEGEND
0-2%
2%-8%
ABOVE 8%
SUFFOLK
NORFOLK
PLYMOUTH
BRISTOL
BARNSTABLE
BOSTON
QUINCY
BRAINTREE
RANDOLPH
MILTON
HINGHAM
HULL
COHASSET
SCITUATE
NORWELL
MARSHFIELD
DUXBURY
PEMBROKE
HANOVER
HANSON
ROCKLAND
ABINGTON
WHITMAN
BROCKTON
EAST BRIDGEWATER
WEST BRIDGEWATER
BRIDGEWATER
HALIFAX
PLYMPTON
KINGSTON
PLYMOUTH
CARVER
MIDDLEBOROUGH
3
WAREHAM
ROCHESTER
MARION
MATTAPOISETT
FAIRHAVEN
5
ACUSHNET
NEW BEDFORD
18
DARTMOUTH
WESTPORT
6
FALL RIVER
FREETOWN
LAKEVILLE
3
BERKLEY
DIGHTON
TAUNTON
3
RAYNHAM
NORTON
EASTON
STOUGHTON
AVON
CANTON
SHARON
MANSFIELD
FOXBOROUGH
ATTLEBORO
2
NORTH ATTLEBOROUGH
REHOBOTH
2
SEEKONK
SWANSEA
SOMERSET
PLAINVILLE
WRENTHAM
FRANKLIN
NORFOLK
WALPOLE
NORWOOD
WESTWOOD
DEDHAM
NEEDHAM
WELLESLEY
NEWTON
WESTON
WAYLAND
NATICK
DOVER
MEDFIELD
MILLIS
SHERBORN
HOLLISTON
MEDWAY
BELLINGHAM
FRAMINGHAM
ASHLAND
BOURNE
SANDWICH
MASHPEE
FALMOUTH
BARNSTABLE
YARMOUTH
DENNIS
BREWSTER
WELLFLEET
TRURO

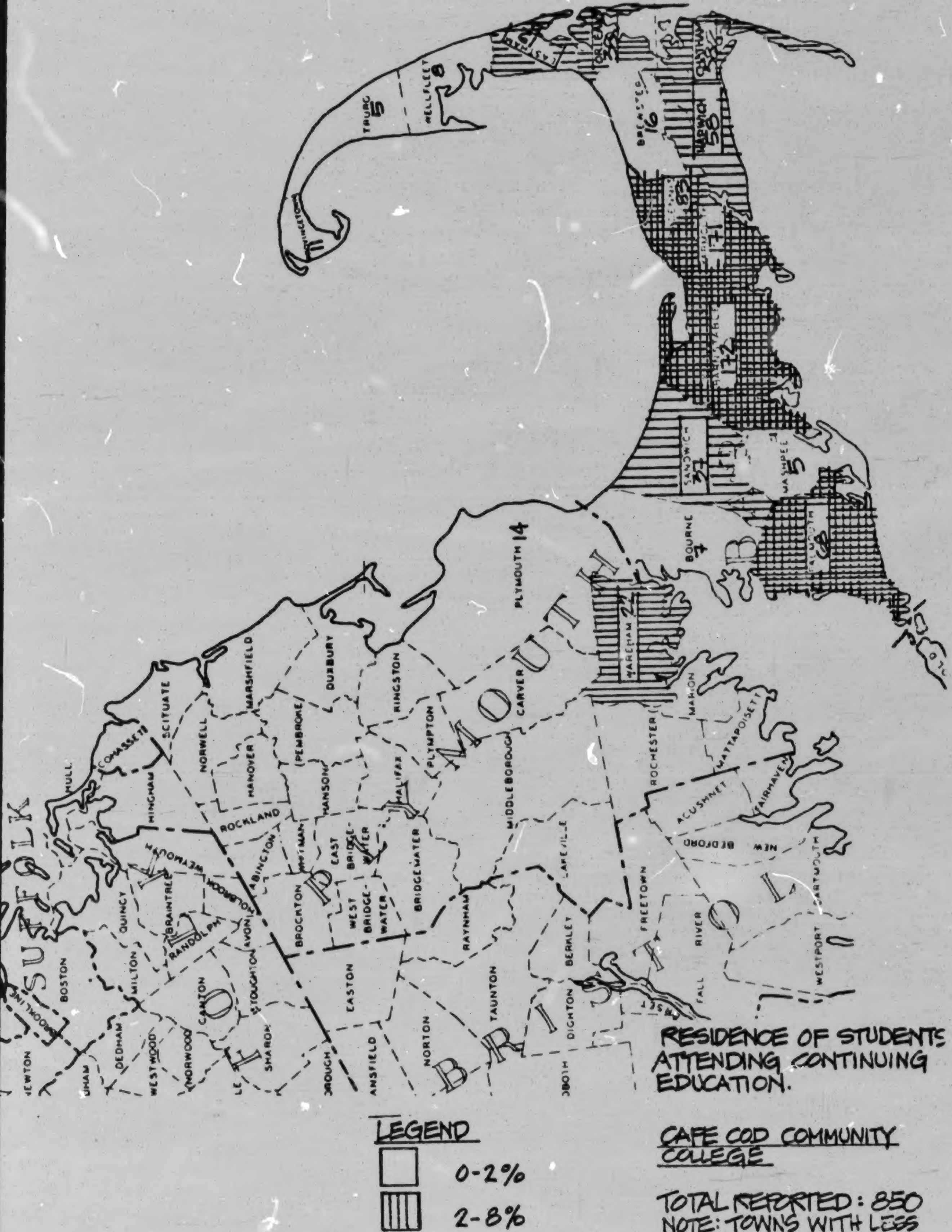
RESIDENCE OF STUDENTS ATTENDING PART-TIME IN REGULAR COLLEGE PROGRAM.

SOUTHEASTERN MASS. U.

TOTAL REPORTED: 126

NOTE: TOWNS WITH LESS THAN ONE STUDENT ARE OMITTED.

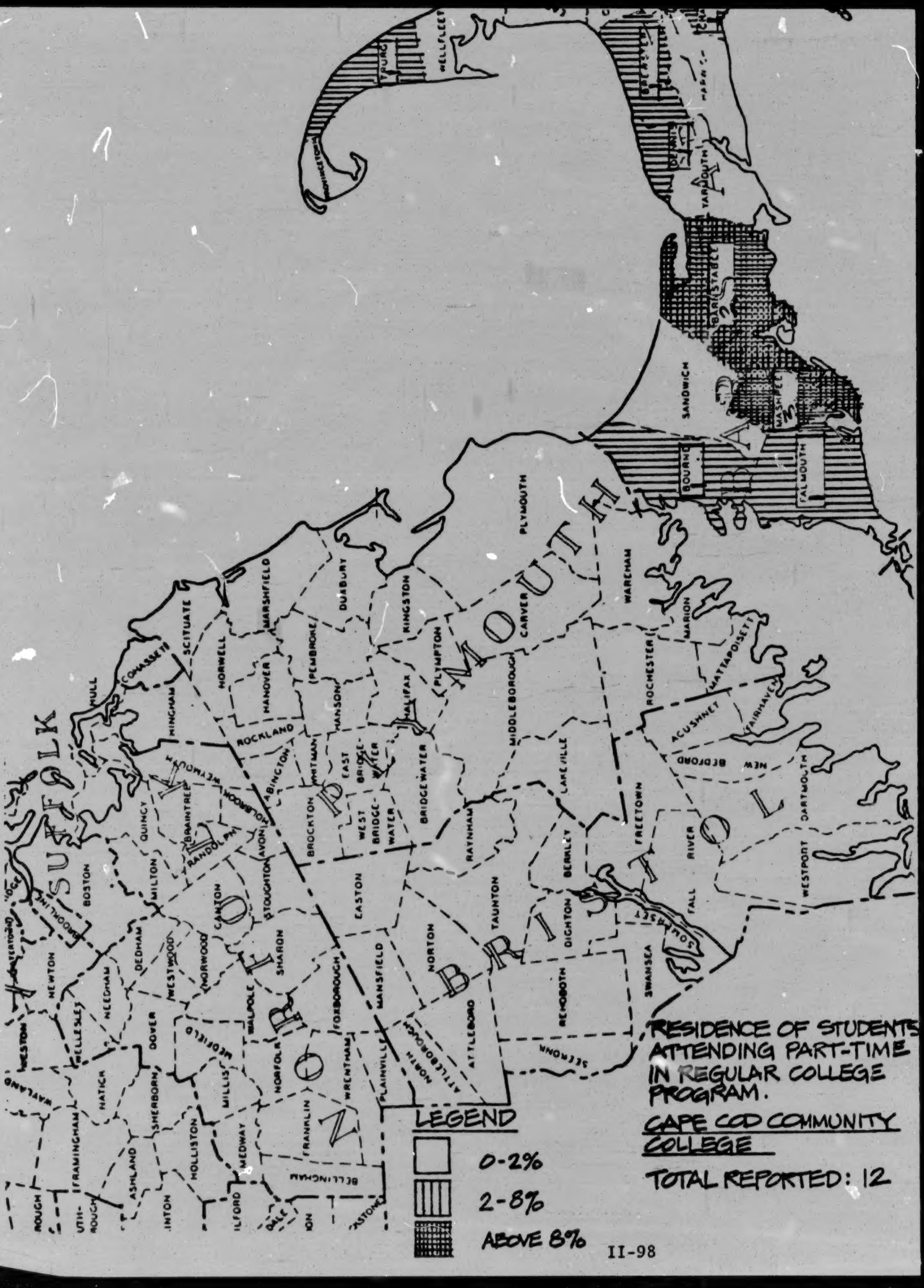
FALMOUTH/BARNSTABLE
GEOGRAPHIC SERVICE AREA
(Southeast Region)


LEGEND
▢ 0-2%
▥ 2-8%
▦ ABOVE 8%
TRURO 5
WELLFLEET 8
BREWSTER 16
HARWICH 58
YARMOUTH 171
BARNSTABLE 172
MASHPEE 5
PLYMOUTH 14
SUFFOLK
NORFOLK
PLYMOUTH
BRISTOL

RESIDENCE OF STUDENTS ATTENDING CONTINUING EDUCATION.

CAPE COD COMMUNITY COLLEGE

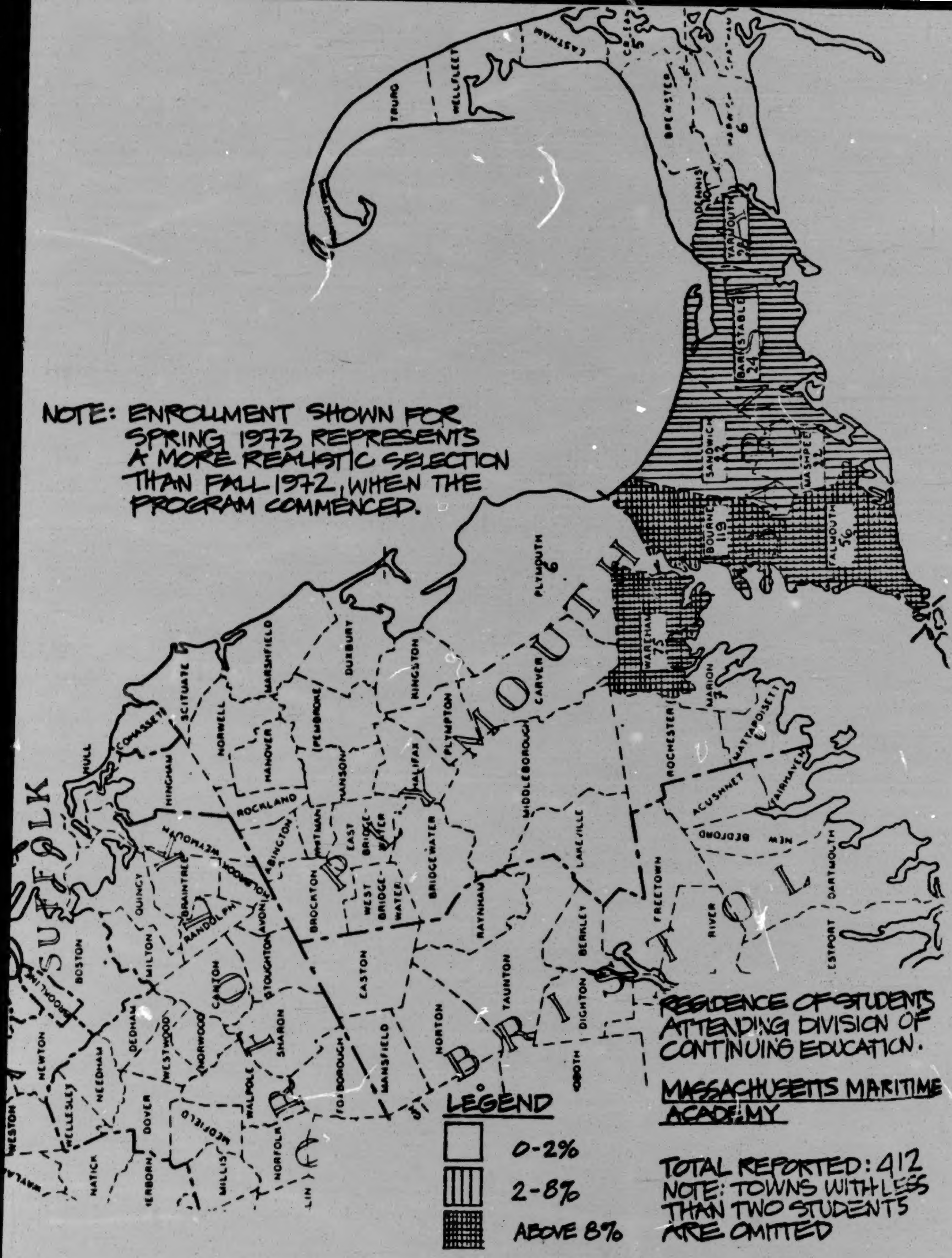
TOTAL REPORTED: 850
NOTE: TOWNS WITH LESS THAN FIVE STUDENTS ARE OMITTED.


LEGEND
0-2%
2-8%
ABOVE 8%
SUFFOLK
NORFOLK
PLYMOUTH
BRISTOL
BARNSTABLE
PROVINCETOWN
TRURO
WELLFLEET
EASTHAM
ORLEANS
CHATHAM
HARWICH
BREWSTER
DENNIS
YARMOUTH
BARNSTABLE
SANDWICH
MASHPEE
BOURNE
FALMOUTH
PLYMOUTH
WAREHAM
MARION
MATTAPOISETT
ROCHESTER
CARVER
KINGSTON
DUXBURY
MARSHFIELD
SCITUATE
COHASSET
HULL
HINGHAM
NORWELL
HANOVER
PEMBROKE
HANSON
HALIFAX
PLYMPTON
MIDDLEBOROUGH
LAKEVILLE
FREETOWN
ACUSHNET
FAIRHAVEN
NEW BEDFORD
DARTMOUTH
WESTPORT
FALL RIVER
SOMERSET
SWANSEA
SEEKONK
REHOBOTH
DIGHTON
BERKLEY
TAUNTON
RAYNHAM
NORTON
ATTLEBORO
NORTH ATTLEBOROUGH
PLAINVILLE
MANSFIELD
EASTON
BRIDGEWATER
WEST BRIDGEWATER
EAST BRIDGEWATER
WHITMAN
BROCKTON
ABINGTON
ROCKLAND
WEYMOUTH
BRAINTREE
HOLBROOK
RANDOLPH
AVON
STOUGHTON
QUINCY
MILTON
BOSTON
BROOKLINE
CANTON
SHARON
FOXBOROUGH
WRENTHAM
FRANKLIN
NORFOLK
WALPOLE
NORWOOD
WESTWOOD
DEDHAM
NEEDHAM
NEWTON
WELLESLEY
WESTON
WAYLAND
NATICK
DOVER
MEDFIELD
MILLIS
SHERBORN
FRAMINGHAM
ASHLAND
HOLLISTON
MEDWAY
BELLINGHAM

RESIDENCE OF STUDENTS ATTENDING PART-TIME IN REGULAR COLLEGE PROGRAM.

CAPE COD COMMUNITY COLLEGE

TOTAL REPORTED: 12



EASTHAM
ORLEANS 5
TRURO
WELLFLEET
BREWSTER
CHATHAM
HARWICH 6
DENNIS 10
YARMOUTH 28
BARNSTABLE 24
SANDWICH 22
MASHPEE 22
BOURNE 119
FALMOUTH 56
PLYMOUTH 6
WAREHAM 75
MARION 7
MATTAPOISETT 6
ROCHESTER
ACUSHNET
FAIRHAVEN
NEW BEDFORD
DARTMOUTH
WESTPORT
FREETOWN
FALL RIVER
LAKEVILLE
MIDDLEBOROUGH
CARVER
KINGSTON
PLYMPTON
DUXBURY
MARSHFIELD
PEMBROKE
HALIFAX
HANSON
HANOVER
NORWELL
SCITUATE
COHASSET
HINGHAM
HULL
ROCKLAND
ABINGTON
WHITMAN
EAST BRIDGEWATER
WEST BRIDGEWATER
BRIDGEWATER
BROCKTON
WEYMOUTH
BRAINTREE
HOLBROOK
RANDOLPH
AVON
QUINCY
MILTON
BOSTON
BROOKLINE
STOUGHTON
CANTON
EASTON
RAYNHAM
TAUNTON
BERKLEY
DIGHTON
REHOBOTH
NORTON
MANSFIELD
FOXBOROUGH
SHARON
WALPOLE
NORWOOD
WESTWOOD
DEDHAM
NEEDHAM
NEWTON
WELLESLEY
WESTON
NATICK
DOVER
SHERBORN
MEDFIELD
MILLIS
NORFOLK
FRANKLIN
WAYLAND
SUFFOLK
NORFOLK
PLYMOUTH
BRISTOL
BARNSTABLE

NOTE: ENROLLMENT SHOWN FOR SPRING 1973 REPRESENTS A MORE REALISTIC SELECTION THAN FALL 1972, WHEN THE PROGRAM COMMENCED.

RESIDENCE OF STUDENTS ATTENDING DIVISION OF CONTINUING EDUCATION.

MASSACHUSETTS MARITIME ACADEMY

LEGEND

☐ 0-2%

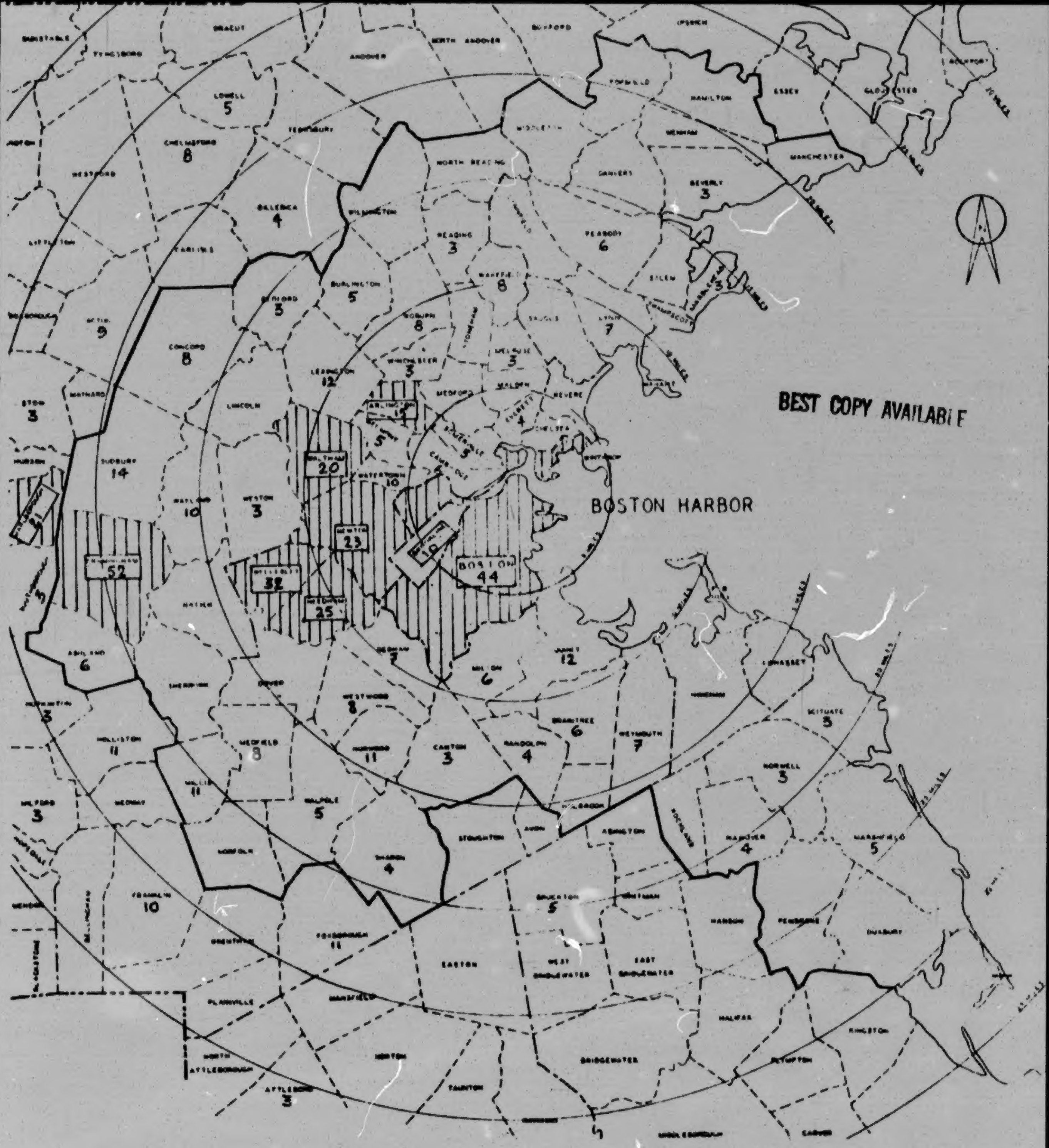
▥ 2-8%

▦ ABOVE 8%

TOTAL REPORTED: 412
NOTE: TOWNS WITH LESS THAN TWO STUDENTS ARE OMITTED

BOSTON

GEOGRAPHIC SERVICE AREA


DRACUT
TYNGSBORO
NORTH ANDOVER
ANDOVER
BOXFORD
IPSWICH
TOPSFIELD
HAMILTON
ESSEX
GLOUCESTER
ROCKPORT
LOWELL
5
TEWKSBURY
MIDDLETON
WENHAM
MANCHESTER
CHELMSFORD
8
WESTFORD
NORTH READING
DANVERS
BEVERLY
3
BILLERICA
4
WILMINGTON
LITTLETON
CARLISLE
READING
3
PEABODY
6
BURLINGTON
5
WAKEFIELD
8
SALEM
MARBLEHEAD
3
SWAMPSCOTT
BEDFORD
3
ACTON
9
WOBURN
8
SAUGUS
LYNN
7
CONCORD
8
WINCHESTER
3
MELROSE
3
NAHANT
LEXINGTON
12
STOW
3
MAYNARD
MEDFORD
MALDEN
REVERE
LINCOLN
ARLINGTON
15
EVERETT
5
CHELSEA
WINTHROP
SOMERVILLE
5
CAMBRIDGE
HUDSON
SUDBURY
14
WALTHAM
20
WATERTOWN
10
WAYLAND
10
WESTON
3
BOSTON HARBOR
NEWTON
23
BROOKLINE
10
BOSTON
44
FRAMINGHAM
52
WELLESLEY
32
NEEDHAM
25
NATICK
ASHLAND
6
DEDHAM
7
MILTON
6
QUINCY
12
COHASSET
SHERBORN
DOVER
WESTWOOD
8
HINGHAM
HOPKINTON
3
BRAINTREE
6
SCITUATE
5
HOLLISTON
11
MEDFIELD
8
NORWOOD
11
CANTON
3
RANDOLPH
4
WEYMOUTH
7
NORWELL
3
MILFORD
3
MEDWAY
MILLIS
11
WALPOLE
5
HOLBROOK
AVON
ABINGTON
STOUGHTON
HANOVER
4
MARSHFIELD
5
NORFOLK
SHARON
4
FRANKLIN
10
BROCKTON
5
WHITMAN
HANSON
PEMBROKE
DUXBURY
WRENTHAM
FOXBOROUGH
11
EASTON
WEST BRIDGEWATER
EAST BRIDGEWATER
PLAINVILLE
MANSFIELD
HALIFAX
KINGSTON
NORTH ATTLEBOROUGH
NORTON
BRIDGEWATER
PLYMPTON
ATTLEBORO
3
TAUNTON
MIDDLEBOROUGH
CARVER

BEST COPY AVAILABLE

LEGEND

☐ 0-2%

▥ 2-8%

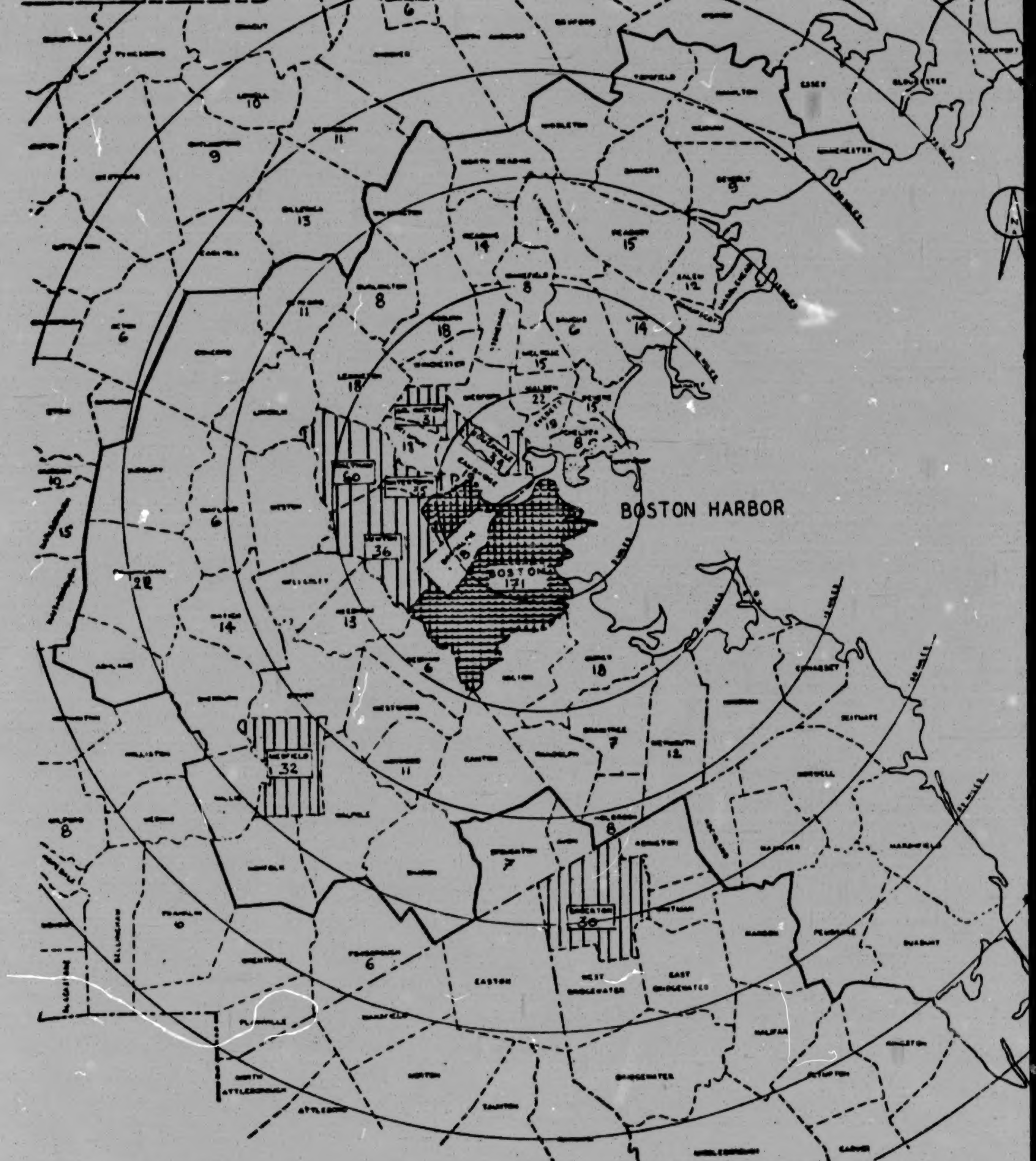
▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING CONTINUING EDUCATION

BABSON COLLEGE

TOTAL REPORTED: 693

NOTE: TOWNS WITH LESS THAN THREE STUDENTS ARE OMITTED.


BOSTON HARBOR
BOSTON
171
60
36
35
34
32
31
30
22
18
15
14
13
12
11
10
9
8
7
6

LEGEND

☐ 0-2%

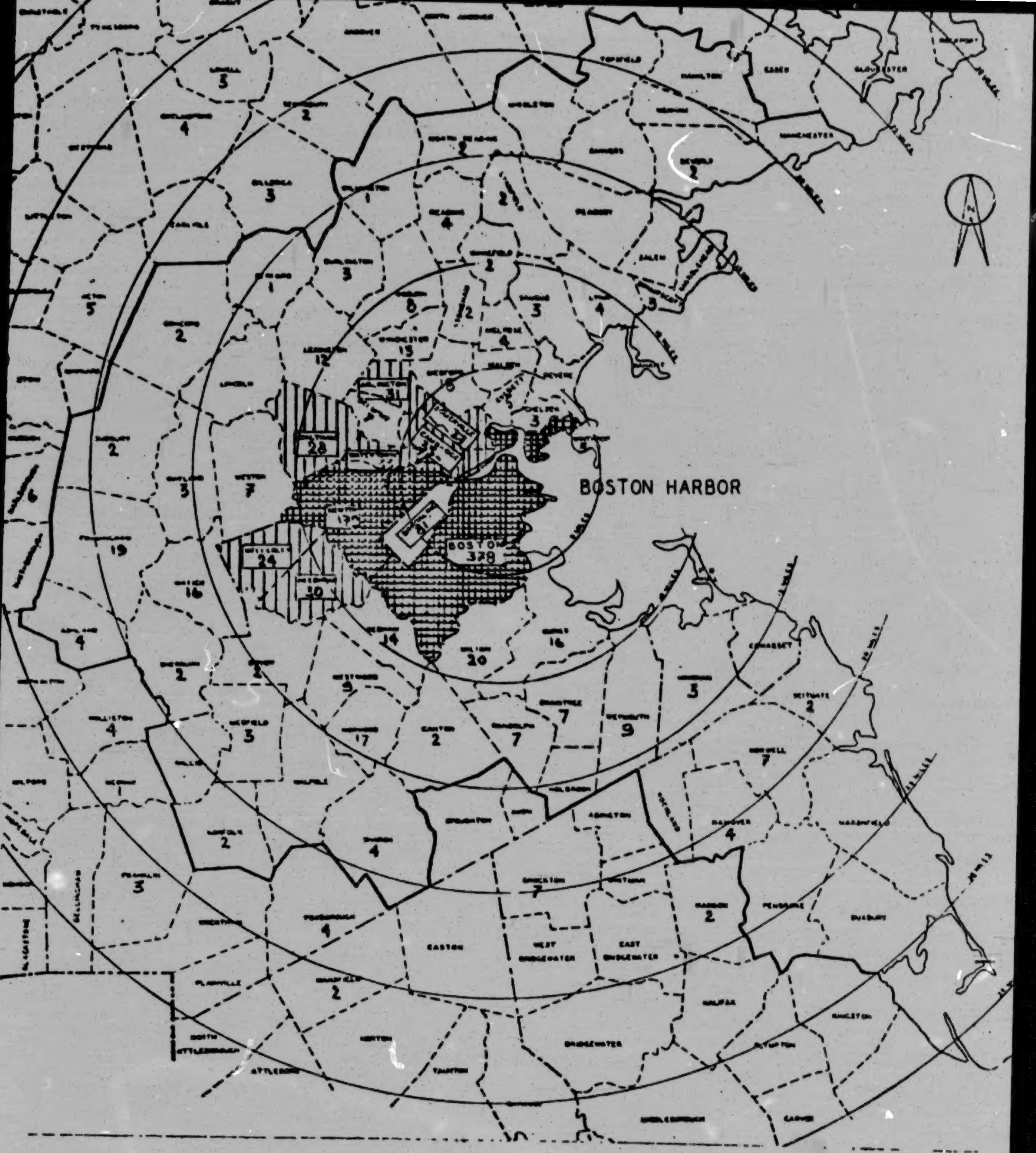
▥ 2-8%

▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING CENTER FOR CONTINUING EDUCATION

BENTLEY COLLEGE

TOTAL REPORTED: 1200


BOSTON HARBOR
BOSTON
328

LEGEND

☐ 0-2%

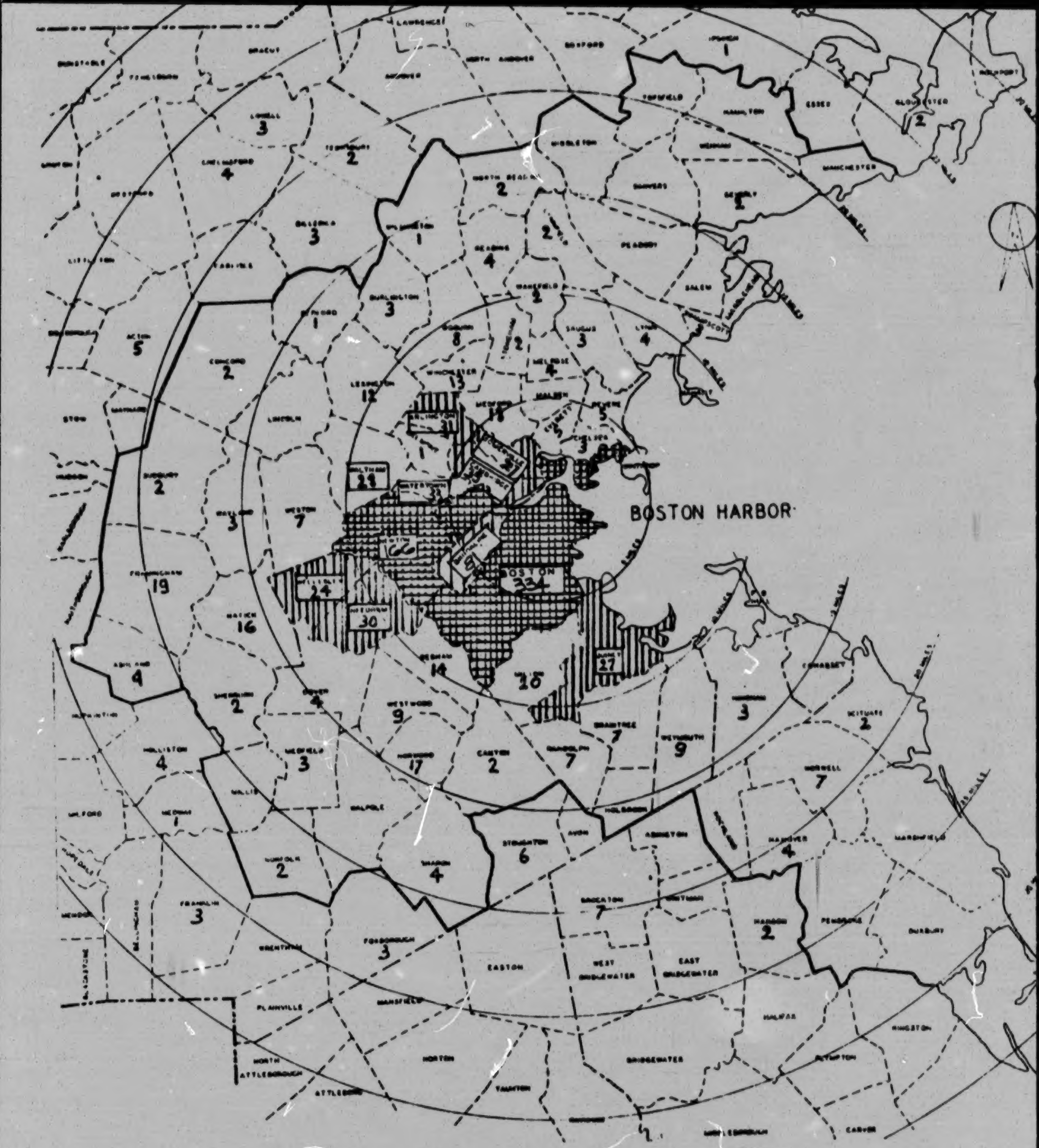
▥ 2-8%

▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING CONTINUING EDUCATION

BOSTON COLLEGE

TOTAL REPORTED: 1070


BOSTON HARBOR
BOSTON
334

LEGEND

☐ 0-2%

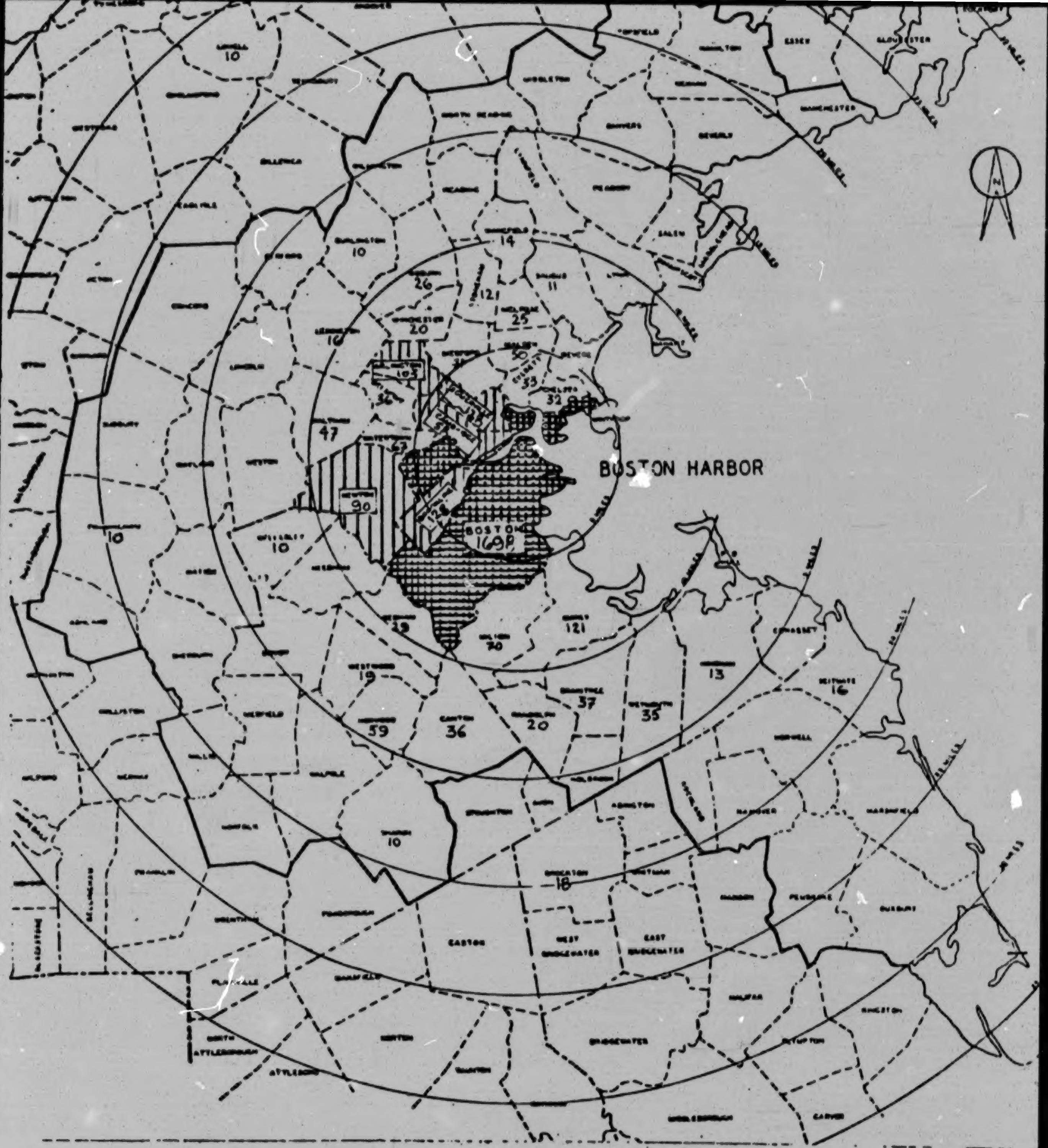
▥ 2-8%

▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING EVENING COLLEGE.

BOSTON COLLEGE

TOTAL REPORTED: 1203


BOSTON HARBOR
BOSTON
10
10
14
26
121
11
25
20
16
105
36
30
33
32
47
67
90
10
10
23
121
30
13
16
19
37
59
36
20
35
10
18

LEGEND

☐ 0-2%

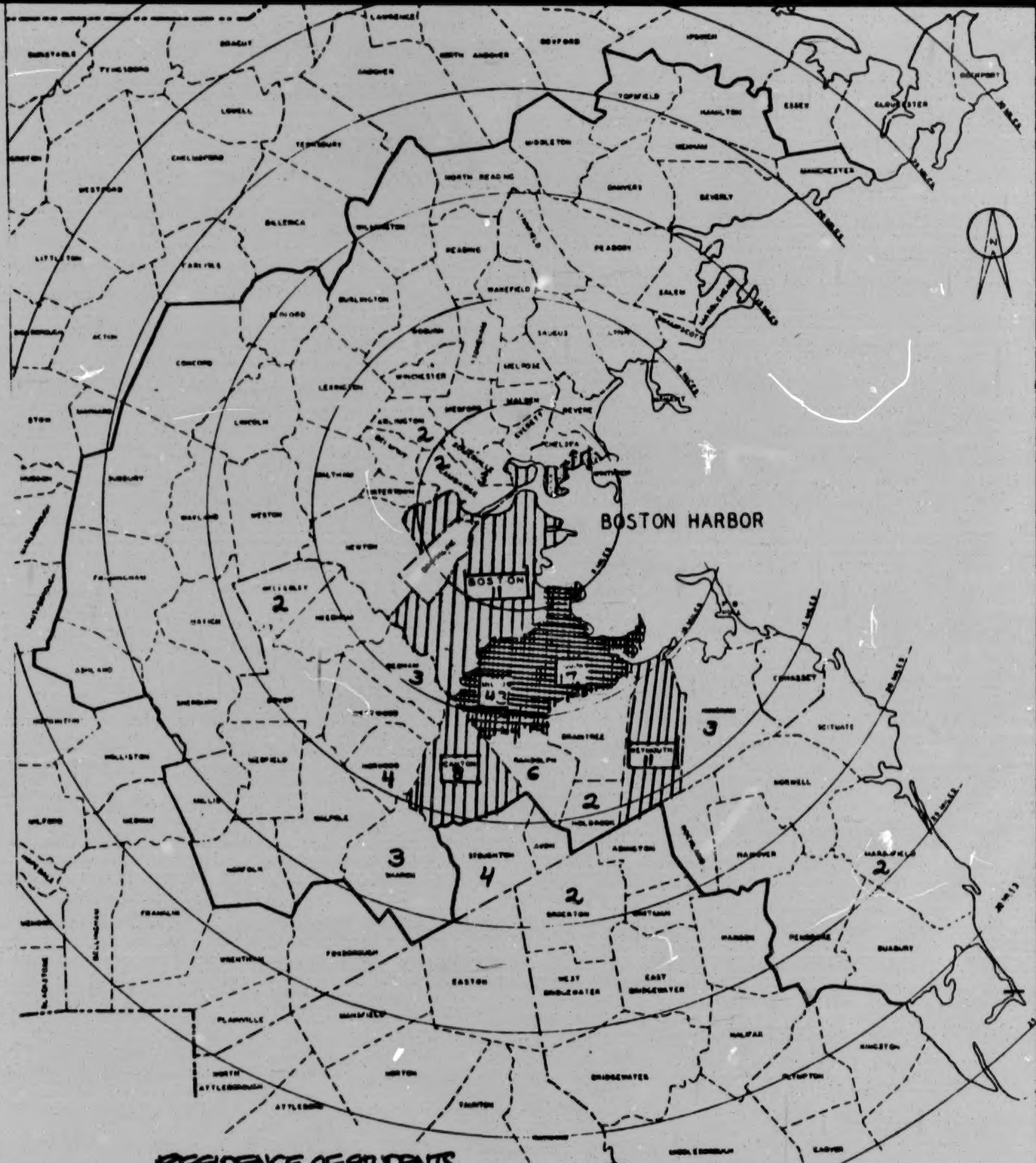
▥ 2-8%

▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING SPECIAL PROGRAMS AND CONTINUING EDUCATION.

BOSTON STATE COLLEGE

TOTAL REPORTED: 3735
NOTE: TOWNS WITH LESS THAN TEN STUDENTS ARE OMITTED.


BOSTON HARBOR
BOSTON
11
43
17
11
2
2
2
3
3
3
4
4
6
8
2
3
2
2
2
N
LAWRENCE
NORTH ANDOVER
ANDOVER
TOPSFIELD
HAMILTON
ESSEX
GLOUCESTER
MANCHESTER
BEVERLY
DANVERS
PEABODY
SALEM
LYNN
SAUGUS
WAKEFIELD
READING
NORTH READING
MIDDLETON
WILMINGTON
BILLERICA
CHELMSFORD
LOWELL
TEWKSBURY
WESTFORD
LITTLETON
CARLISLE
BURLINGTON
WOBURN
ACTON
CONCORD
LEXINGTON
WINCHESTER
MELROSE
MEDFORD
MALDEN
REVERE
CHELSEA
ARLINGTON
LINCOLN
SUDBURY
WALTHAM
WATERTOWN
WESTON
WAYLAND
NEWTON
FRAMINGHAM
WELLESLEY
NATICK
NEEDHAM
ASHLAND
HOLLISTON
MEDFIELD
WESTWOOD
CANTON
BRAINTREE
WEYMOUTH
RANDOLPH
HOLBROOK
COHASSET
SCITUATE
NORWELL
HANOVER
MARSHFIELD
ABINGTON
AVON
STOUGHTON
SHARON
WALPOLE
NORFOLK
MILLIS
FRANKLIN
WRENTHAM
FOXBOROUGH
EASTON
BROCKTON
HANSON
PEMBROKE
DUXBURY
WEST BRIDGEWATER
EAST BRIDGEWATER
PLAINVILLE
MANSFIELD
NORTON
NORTH ATTLEBOROUGH
ATTLEBORO
TAUNTON
BRIDGEWATER
HALIFAX
KINGSTON
PLYMPTON
MIDDLEBOROUGH
CARVER
MILFORD
BELLINGHAM
STOW

RESIDENCE OF STUDENTS ATTENDING CONTINUING EDUCATION

CURRY COLLEGE

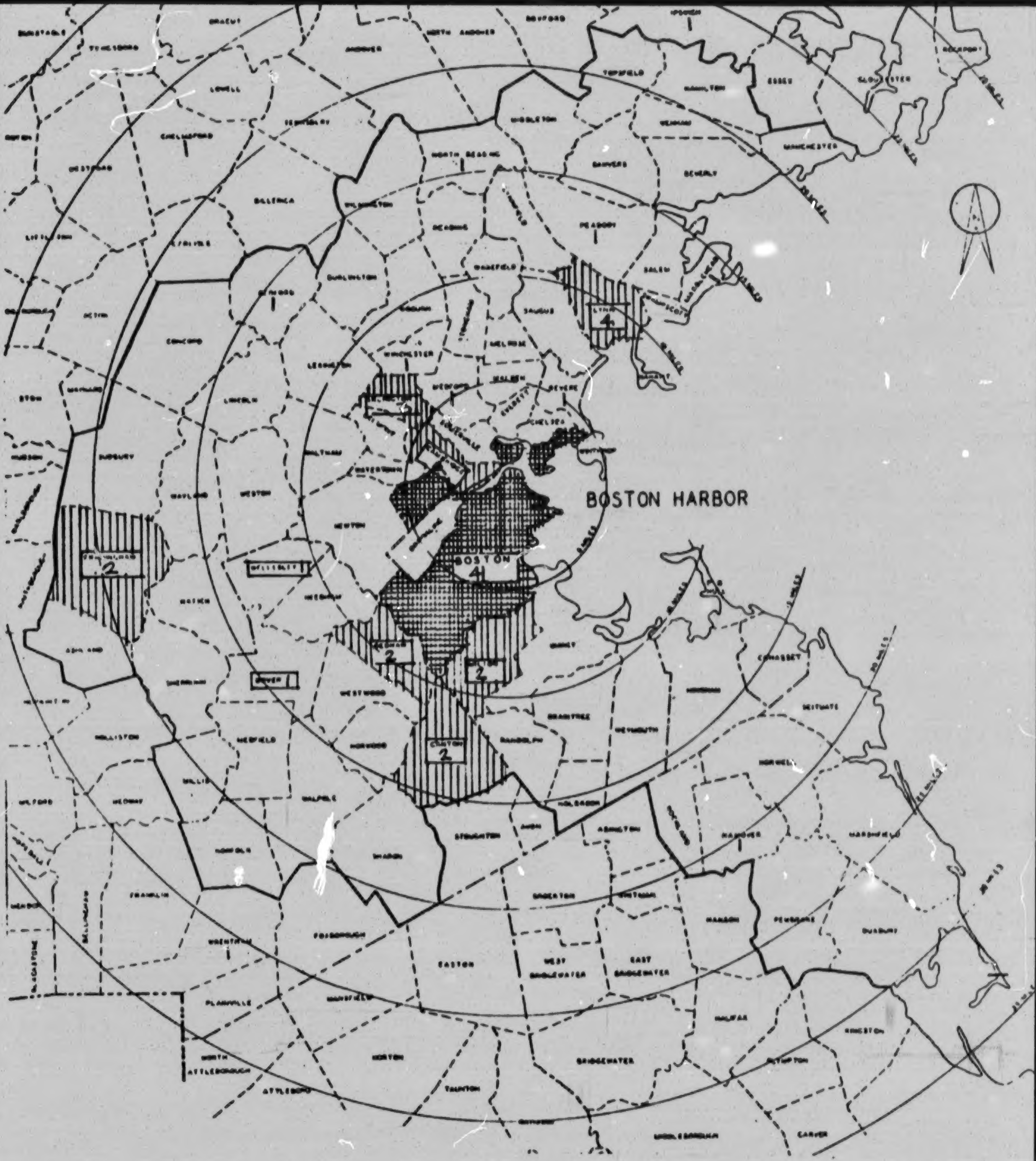
LEGEND

☐ 0-2%

▥ 2-8%

▦ ABOVE 8%

TOTAL REPORTED: 442
NOTE: TOWNS WITH LESS THAN TWO STUDENTS ARE OMITTED


CHELMSFORD
1
LOWELL
TEWKSBURY
ANDOVER
NORTH ANDOVER
BOXFORD
TOPSFIELD
HAMILTON
ESSEX
GLOUCESTER
MANCHESTER
MIDDLETON
NORTH READING
1
DANVERS
BEVERLY
BILLERICA
WILMINGTON
READING
PEABODY
1
SALEM
MARBLEHEAD
WAKEFIELD
BURLINGTON
BEDFORD
1
ACTON
CONCORD
LEXINGTON
WINCHESTER
WOBURN
MELROSE
SAUGUS
LYNN
4
MEDFORD
MALDEN
REVERE
EVERETT
CHELSEA
SOMERVILLE
WALTHAM
WATERTOWN
LINCOLN
SUDBURY
WAYLAND
WESTON
NEWTON
BOSTON HARBOR
BOSTON
41
FRAMINGHAM
2
WELLESLEY
NATICK
NEEDHAM
2
2
QUINCY
DOVER
ASHLAND
SHERBORN
WESTWOOD
BRAINTREE
WEYMOUTH
COHASSET
HINGHAM
SCITUATE
HOLLISTON
MEDFIELD
NORWOOD
CANTON
2
RANDOLPH
NORWELL
MILLIS
MEDWAY
WALPOLE
HOLBROOK
MILFORD
STOUGHTON
AVON
ABINGTON
HANOVER
MARSHFIELD
NORFOLK
SHARON
FRANKLIN
BROCKTON
WHITMAN
HANSON
PEMBROKE
DUXBURY
FOXBOROUGH
WRENTHAM
1
EASTON
WEST BRIDGEWATER
EAST BRIDGEWATER
PLAINVILLE
MANSFIELD
HALIFAX
KINGSTON
NORTON
BRIDGEWATER
PLYMPTON
NORTH ATTLEBOROUGH
ATTLEBORO
TAUNTON
MIDDLEBOROUGH
CARVER

LEGEND

☐ 0-2%

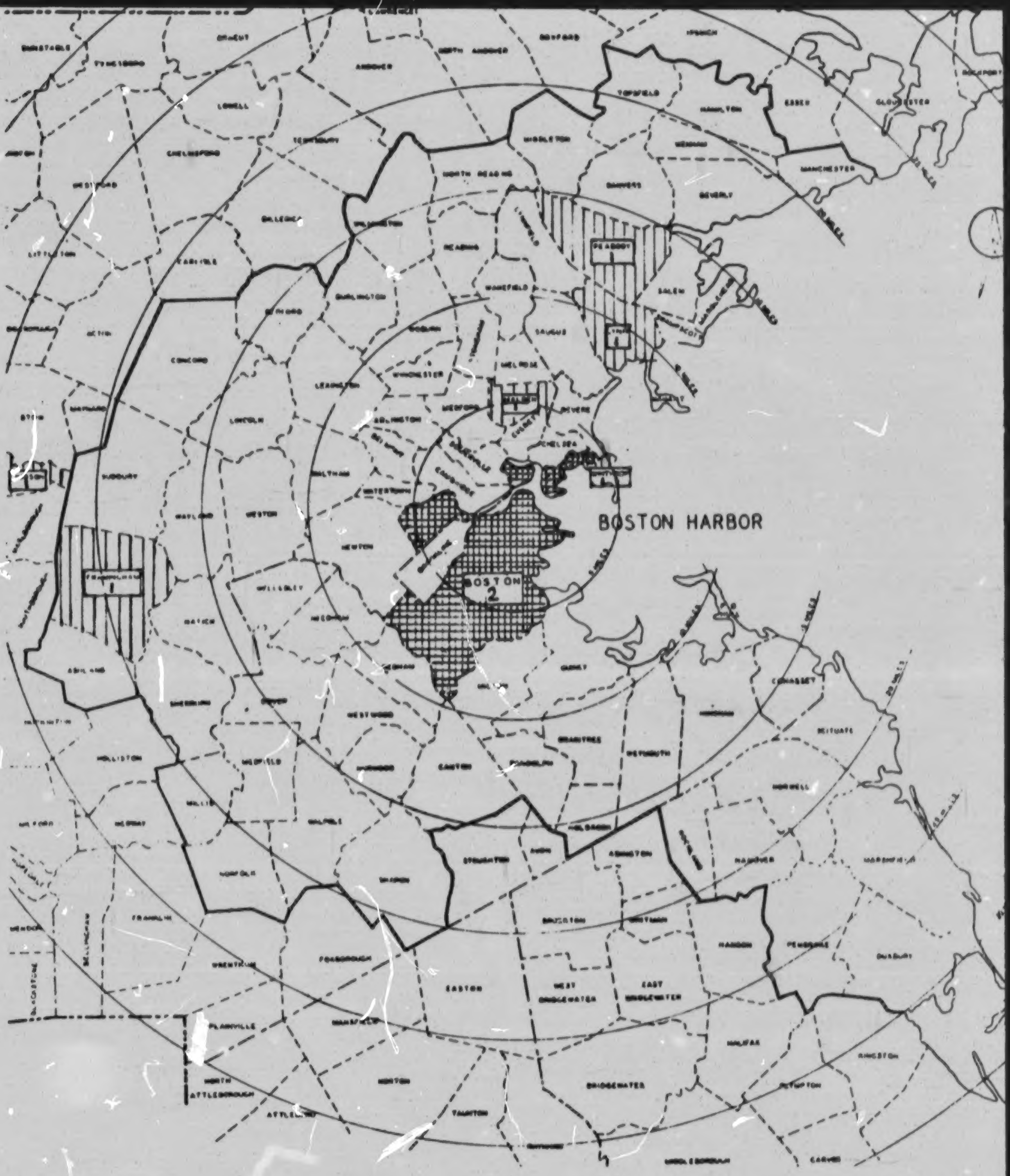
▥ 2°-8%

▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING PART-TIME IN REGULAR COLLEGE PROGRAM

EMERSON COLLEGE

TOTAL REPORTED: 83


BOSTON HARBOR
BOSTON
2

LEGEND

☐ 0-2%

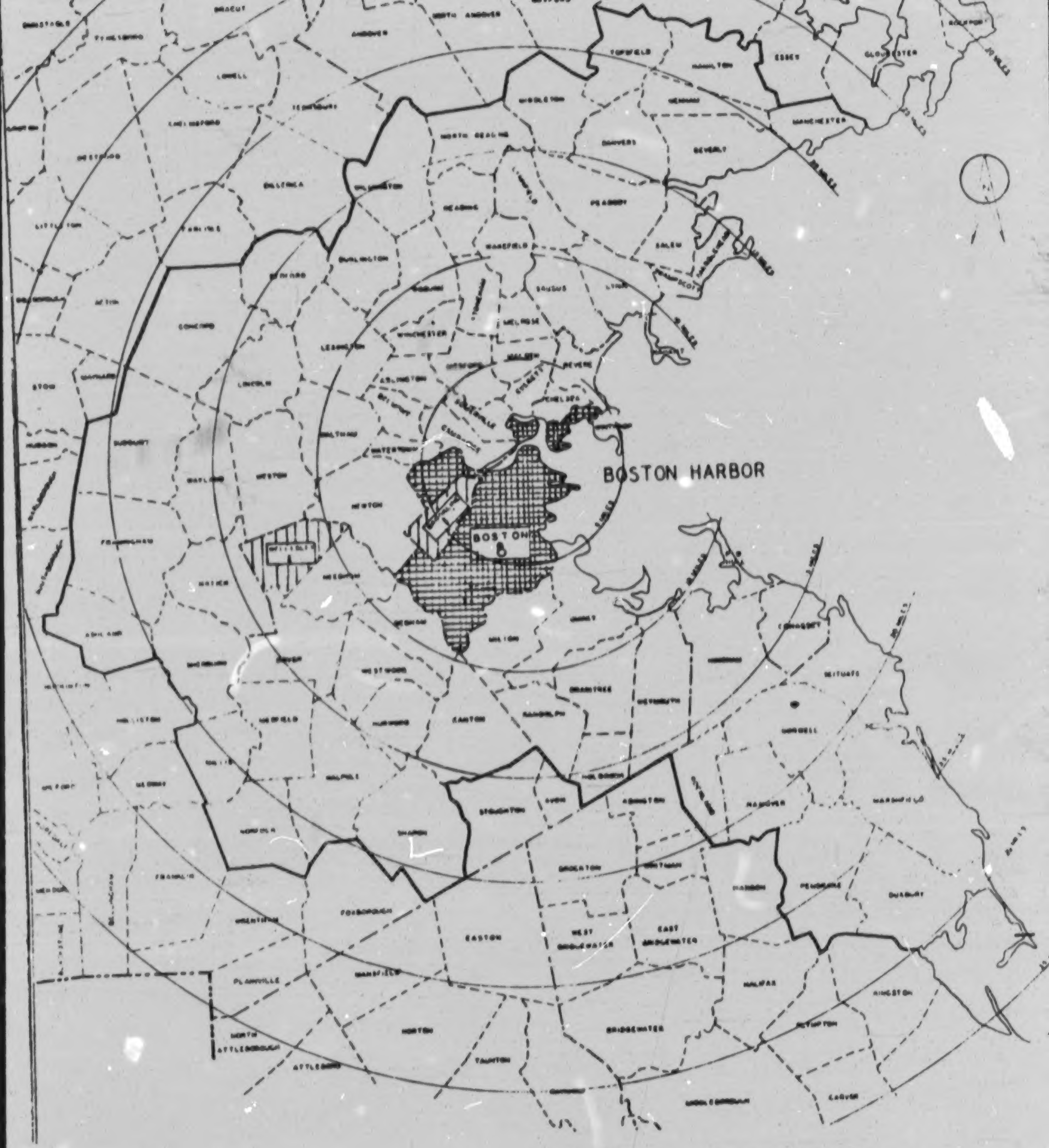
▥ 2-8%

▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING PART TIME IN REGULAR COLLEGE PROGRAM

EMMANUEL COLLEGE

TOTAL REPORTED: 9


BOSTON HARBOR
BOSTON

LEGEND

☐ 0-2%

▥ 2-8%

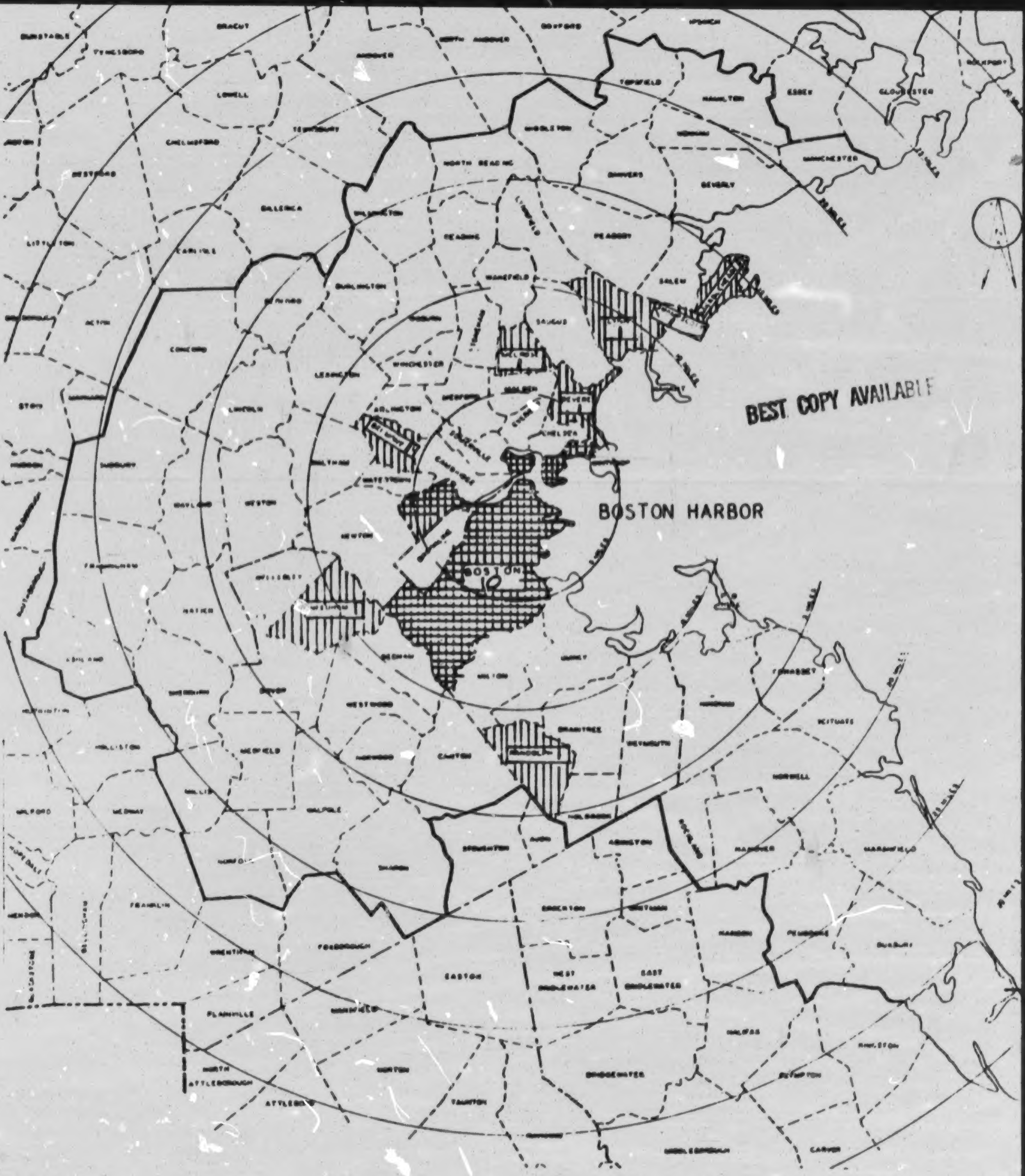
▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING PART TIME IN REGULAR COLLEGE PROGRAM

GARLAND JUNIOR COLLEGE

TOTAL REPORTED: 10

BEST COPY AVAILABLE


BOSTON HARBOR
BOSTON
10

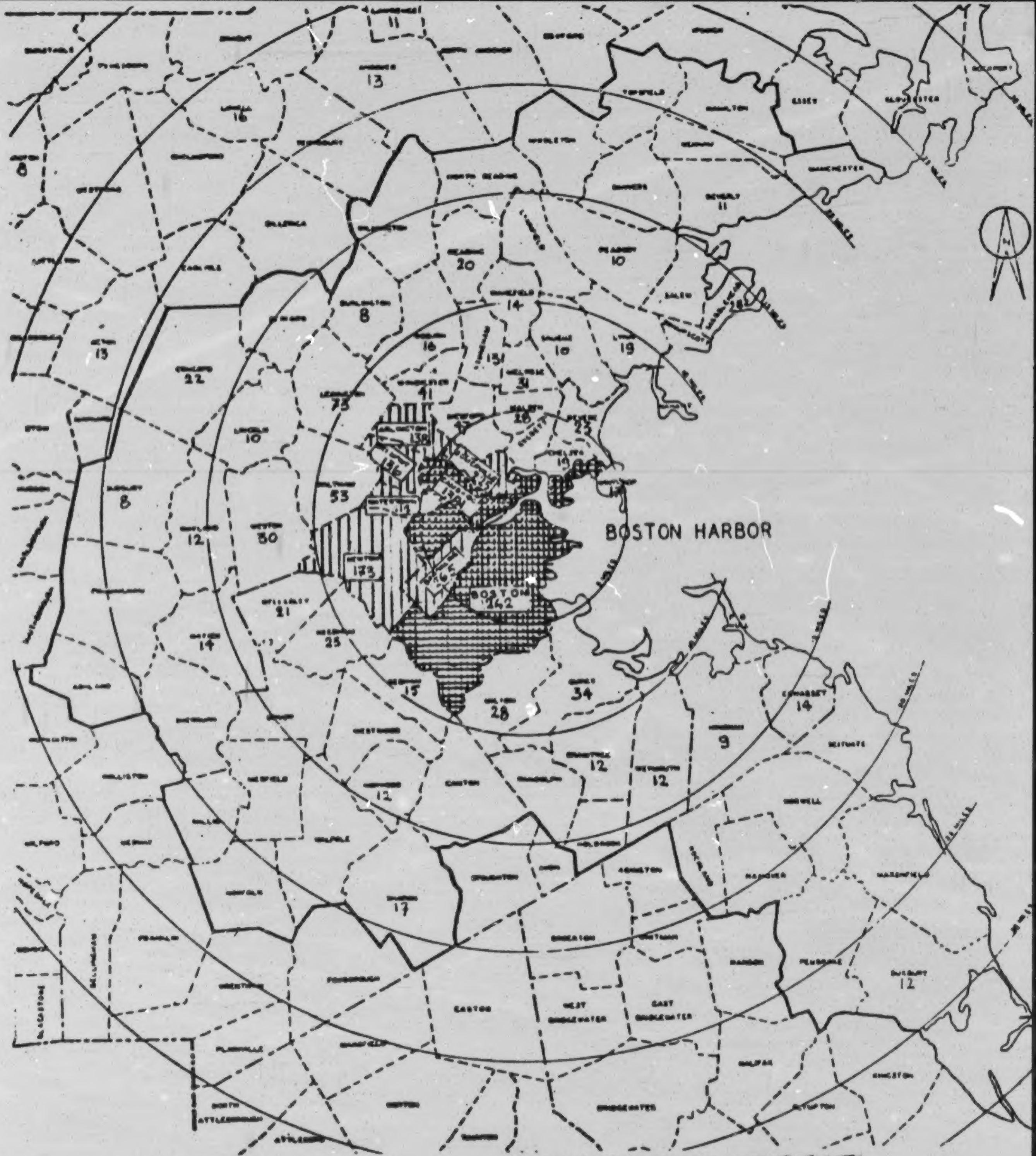
LEGEND

- ☐ 0-2%
- ▥ 2-8%
- ▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING PART TIME IN REGULAR COLLEGE PROGRAM

GRAHAM JUNIOR COLLEGE

TOTAL REPORTED: 18


BOSTON HARBOR
BOSTON
142
133
136
138
75
53
50
41
34
31
30
28
25
23
22
21
20
19
17
16
15
14
13
12
11
10
9
8

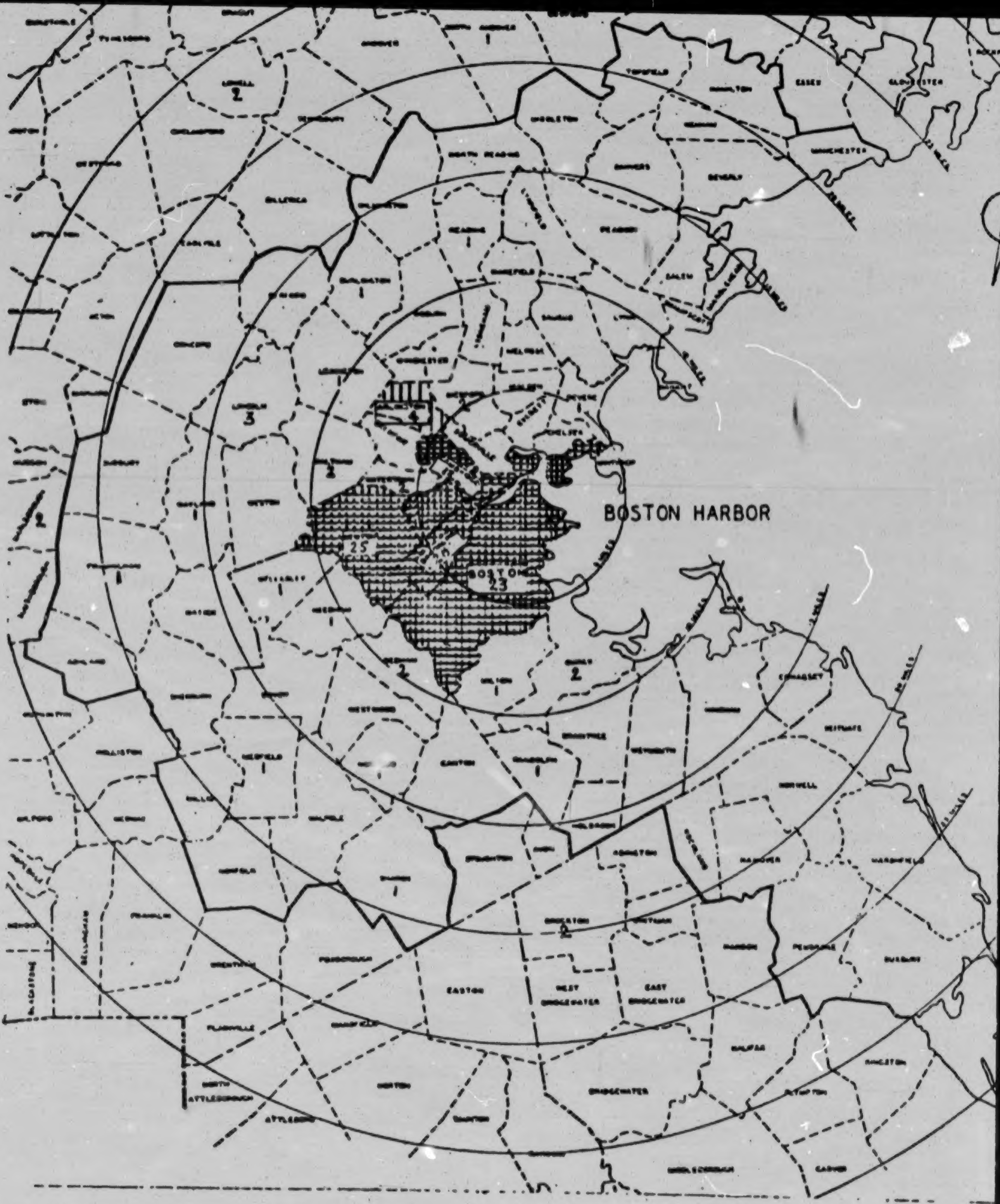
LEGEND

- ☐ 0-2%
- ▥ 2-8%
- ▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING UNIVERSITY EXTENSION

HARVARD UNIVERSITY

TOTAL REPORTED: 4869
NOTE: TOWNS WITH LESS THAN EIGHT STUDENTS ARE OMITTED


BOSTON HARBOR
BOSTON
23
25

LEGEND

☐ 0-2%

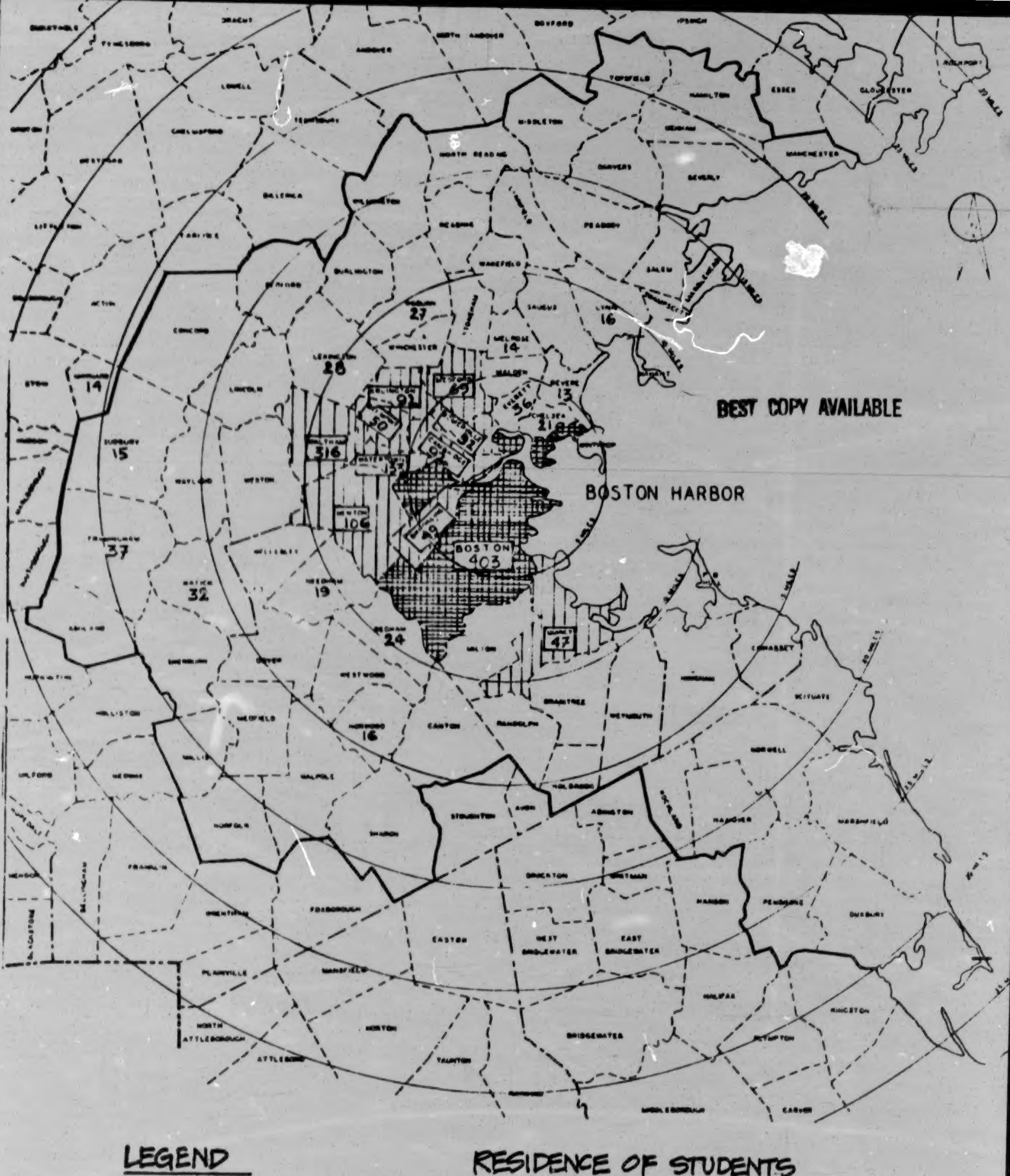
▥ 2-8%

▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING CONTINUING EDUCATION

HEBREW COLLEGE

TOTAL REPORTED: 155



BOSTON HARBOR
BOSTON 403
WALTHAM 316
NEWTON 106
WOBURN 27
LEXINGTON 28
MELROSE 14
LYNN 16
REVERE 13
EVERETT 36
CHELSEA 21
QUINCY 47
DEDHAM 24
NEEDHAM 19
NATICK 32
FRAMINGHAM 37
SUDBURY 15
14
NORWOOD 16

BEST COPY AVAILABLE

LEGEND

☐ 0-2%

▥ 2-8%

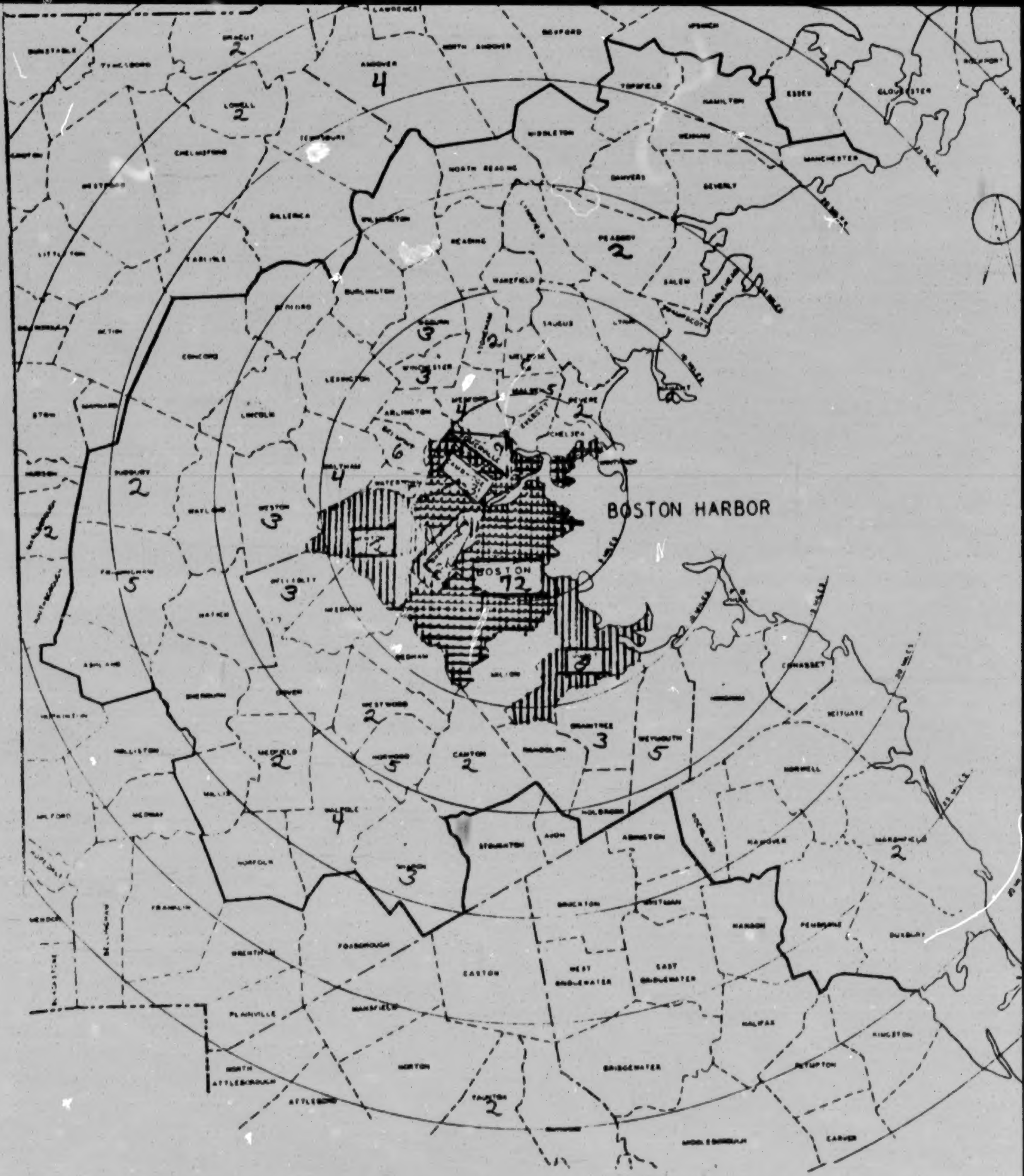
▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING EVENING DIVISION

MASS. BAY COMMUNITY COLLEGE

TOTAL REPORTED: 2131

NOTE: TOWNS WITH LESS THAN ELEVEN STUDENTS ARE OMITTED


LAWRENCE
DRACUT
2
ANDOVER
4
NORTH ANDOVER
BOXFORD
IPSWICH
TYNGSBORO
LOWELL
2
TOPSFIELD
HAMILTON
ESSEX
GLOUCESTER
ROCKPORT
CHELMSFORD
TEWKSBURY
MIDDLETON
WENHAM
MANCHESTER
NORTH READING
DANVERS
BEVERLY
WESTFORD
BILLERICA
WILMINGTON
READING
PEABODY
2
LITTLETON
CARLISLE
WAKEFIELD
SALEM
MARBLEHEAD
SWAMPSCOTT
BEDFORD
BURLINGTON
ACTON
SAUGUS
LYNN
3
2
CONCORD
WINCHESTER
3
MELROSE
LEXINGTON
MEDFORD
4
MALDEN
5
REVERE
2
STOW
MAYNARD
LINCOLN
ARLINGTON
EVERETT
CHELSEA
6
9
HUDSON
SUDBURY
2
WALTHAM
4
BOSTON HARBOR
WAYLAND
WESTON
3
2
72
BOSTON
72
FRAMINGHAM
5
WELLESLEY
3
NEEDHAM
NATICK
ASHLAND
DEDHAM
MILTON
3
COHASSET
SHERBORN
DOVER
WESTWOOD
2
HOPKINTON
SCITUATE
BRAINTREE
3
WEYMOUTH
5
HOLLISTON
MEDFIELD
2
NORWOOD
5
CANTON
2
RANDOLPH
NORWELL
MILFORD
MEDWAY
MILLIS
WALPOLE
4
STOUGHTON
AVON
HOLBROOK
ABINGTON
ROCKLAND
HANOVER
MARSHFIELD
2
NORFOLK
SHARON
3
BROCKTON
WHITMAN
HANSON
PEMBROKE
DUXBURY
MENDON
FRANKLIN
FOXBOROUGH
WRENTHAM
EASTON
WEST BRIDGEWATER
EAST BRIDGEWATER
PLAINVILLE
MANSFIELD
HALIFAX
KINGSTON
NORTH ATTLEBOROUGH
NORTON
BRIDGEWATER
PLYMPTON
ATTLEBORO
TAUNTON
2
RAYNHAM
MIDDLEBOROUGH
CARVER

LEGEND

☐ 0-2%

▥ 2-8%

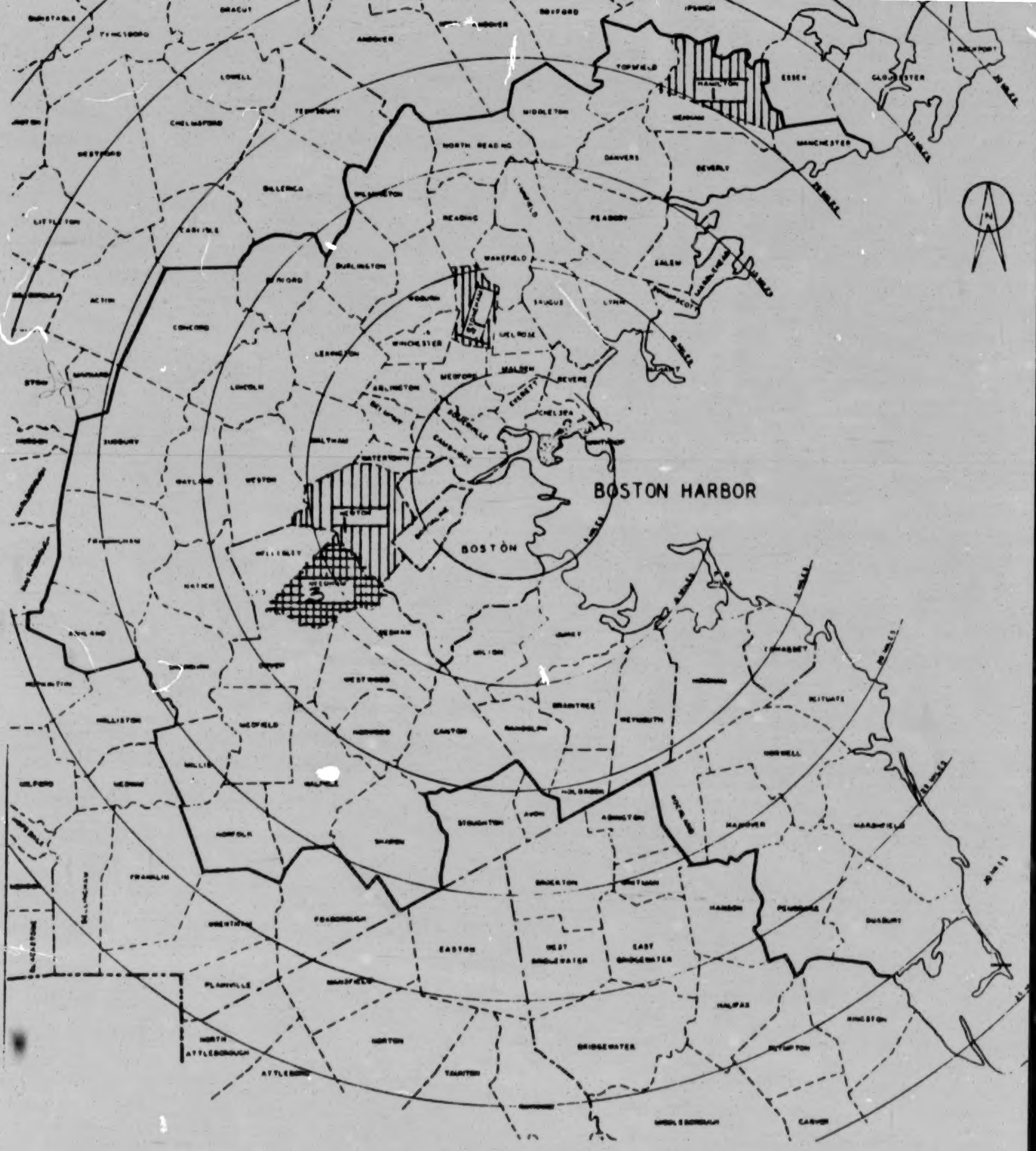
▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING CONTINUING EDUCATION

MASS. COLLEGE OF ART

TOTAL REPORTED: 300

NOTE: TOWNS WITH LESS THAN TWO STUDENTS ARE OMITTED.


BOSTON HARBOR
BOSTON

LEGEND

☐ 0-2%

▥ 2-8%

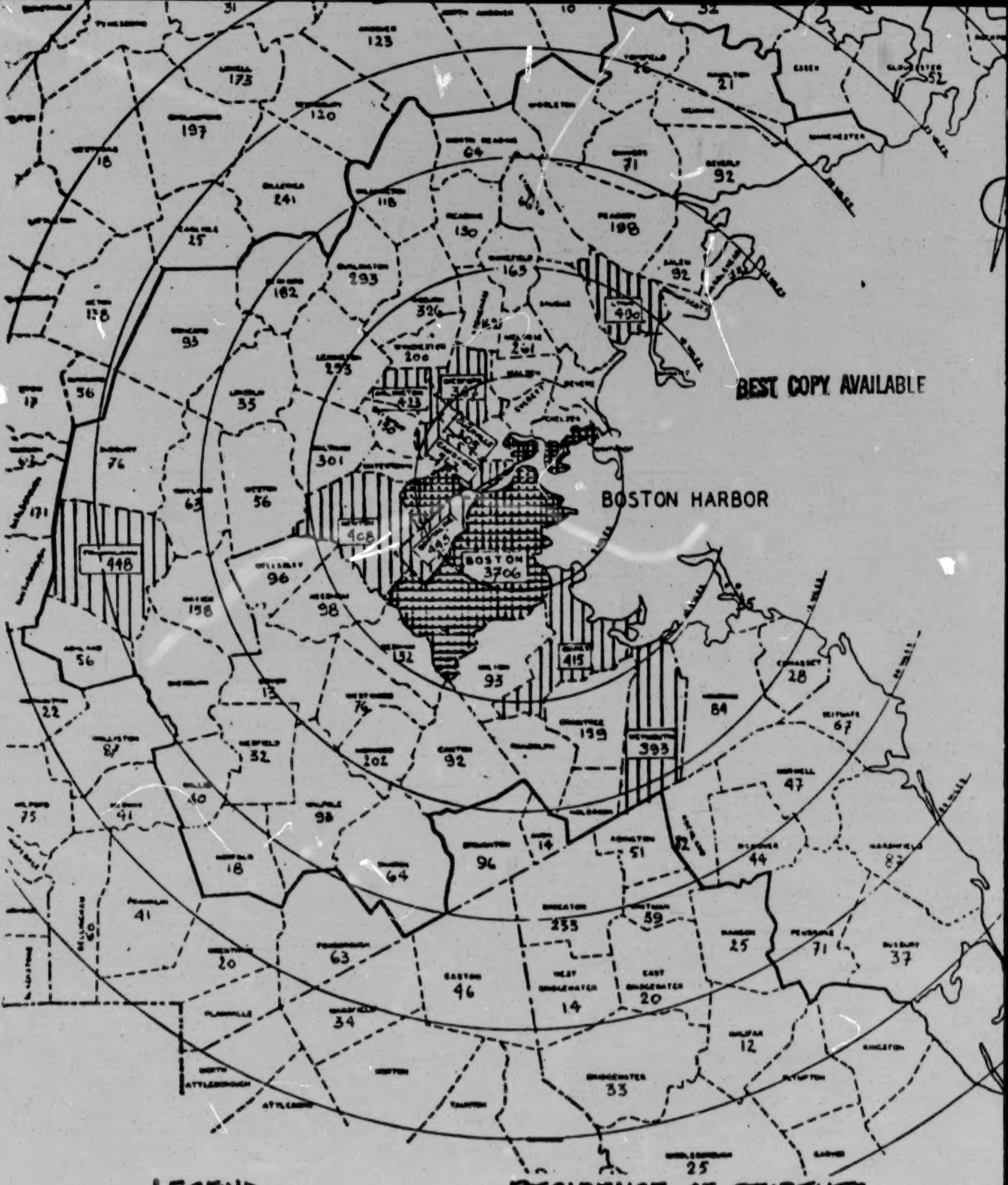
▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING PART TIME IN REGULAR COLLEGE PROGRAM

MT. IDA COLLEGE

TOTAL REPORTED: 6

BEST COPY AVAILABLE


31
10
32
123
173
26
21
52
120
197
18
64
71
92
241
118
25
130
198
293
182
163
92
128
326
490
93
241
200
273
17
56
35
423
34
76
301
63
56
171
BOSTON HARBOR
408
448
445
BOSTON
3706
96
158
98
56
152
415
93
28
22
13
76
84
67
81
32
202
92
159
393
47
75
41
40
98
14
51
18
64
96
44
87
41
235
59
20
63
25
71
37
46
14
20
34
12
33
25

LEGEND

☐ 0-2%

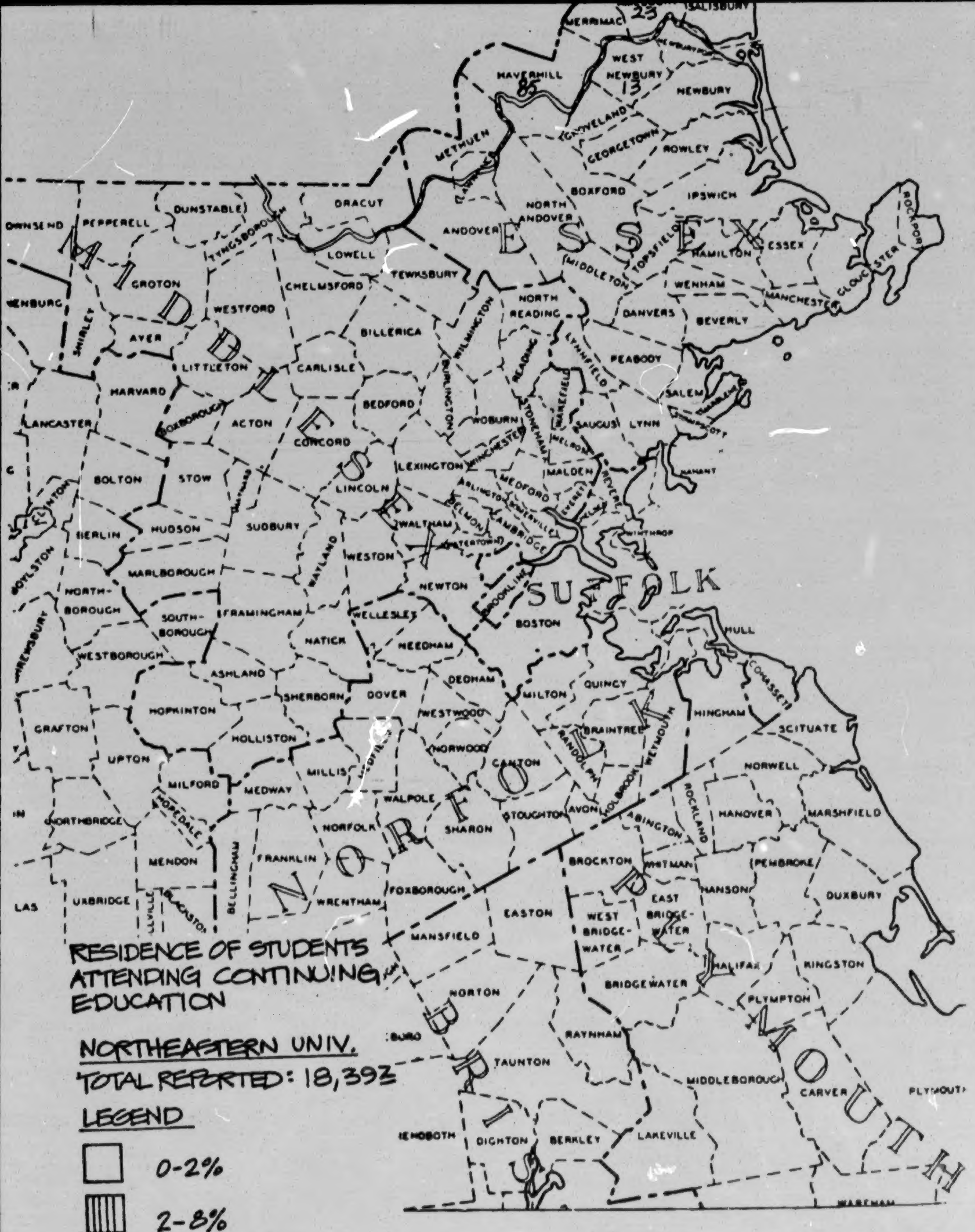
▥ 2-8%

▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING CONTINUING EDUCATION

NORTHEASTERN UNIVERSITY

TOTAL REPORTED: 18,393
NOTE: TOWNS WITH LESS THAN TEN STUDENTS ARE OMITTED.


SALISBURY
23
MERRIMAC
WEST NEWBURY
13
NEWBURY
HAVERHILL
85
GROVELAND
GEORGETOWN
ROWLEY
METHUEN
BOXFORD
IPSWICH
DRACUT
DUNSTABLE
PEPPERELL
OWNSEND
TYNGSBOROUGH
LOWELL
ANDOVER
NORTH ANDOVER
ESSEX
ROCKPORT
MIDDLETON
TOPSFIELD
HAMILTON
ESSEX
GLOUCESTER
TEWKSBURY
CHELMSFORD
GROTON
WESTFORD
NEWBURG
WENHAM
MANCHESTER
NORTH READING
DANVERS
BEVERLY
WILMINGTON
BILLERICA
SHIRLEY
AYER
MIDDLESEX
LITTLETON
CARLISLE
READING
LYNNFIELD
PEABODY
HARVARD
BURLINGTON
WAKEFIELD
SALEM
MARBLEHEAD
SWAMPSCOTT
LANCASTER
BOXBOROUGH
ACTON
BEDFORD
WOBURN
STONEHAM
SAUGUS
LYNN
CONCORD
WINCHESTER
MELROSE
NAHANT
LEXINGTON
MALDEN
BOLTON
STOW
MAYNARD
LINCOLN
MEDFORD
EVERETT
REVERE
ARLINGTON
SOMERVILLE
CHELSEA
CLINTON
BERLIN
HUDSON
SUDBURY
BELMONT
CAMBRIDGE
WALTHAM
WINTHROP
WATERTOWN
BOYLSTON
MARLBOROUGH
WAYLAND
WESTON
NEWTON
SUFFOLK
BROOKLINE
NORTHBOROUGH
SOUTHBOROUGH
FRAMINGHAM
WELLESLEY
BOSTON
HULL
SHREWSBURY
WESTBOROUGH
NATICK
NEEDHAM
ASHLAND
COHASSET
DEDHAM
SHERBORN
DOVER
MILTON
QUINCY
HOPKINTON
WESTWOOD
HINGHAM
GRAFTON
SCITUATE
HOLLISTON
BRAINTREE
NORWOOD
WEYMOUTH
RANDOLPH
UPTON
CANTON
NORWELL
MILLIS
MEDFIELD
MILFORD
MEDWAY
WALPOLE
HOLBROOK
ROCKLAND
HOPEDALE
NORFOLK
IN
NORTHBRIDGE
STOUGHTON
AVON
ABINGTON
HANOVER
MARSHFIELD
SHARON
NORFOLK
MENDON
FRANKLIN
BROCKTON
WHITMAN
PEMBROKE
BELLINGHAM
FOXBOROUGH
HANSON
DUXBURY
LAS
UXBRIDGE
MILLVILLE
BLACKSTONE
WRENTHAM
EASTON
EAST BRIDGEWATER
WEST BRIDGEWATER
MANSFIELD
HALIFAX
KINGSTON
NORTON
BRIDGEWATER
PLYMPTON
PLYMOUTH
BRISTOL
RAYNHAM
TAUNTON
MIDDLEBOROUGH
CARVER
PLYMOUTH
REHOBOTH
DIGHTON
BERKLEY
LAKEVILLE
WAREHAM

RESIDENCE OF STUDENTS ATTENDING CONTINUING EDUCATION

NORTHEASTERN UNIV.

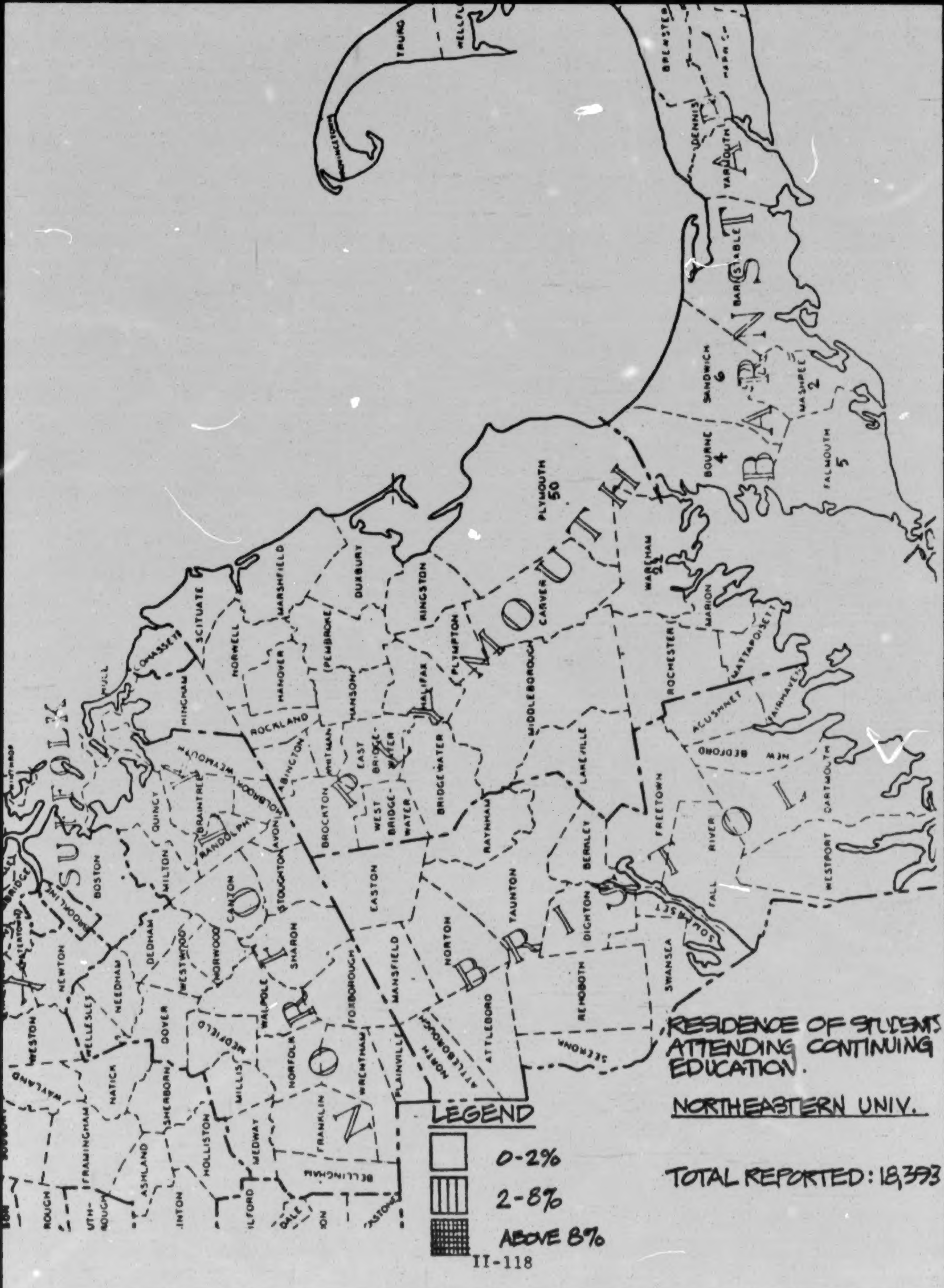
TOTAL REPORTED: 18,393

LEGEND

☐ 0-2%

▥ 2-8%

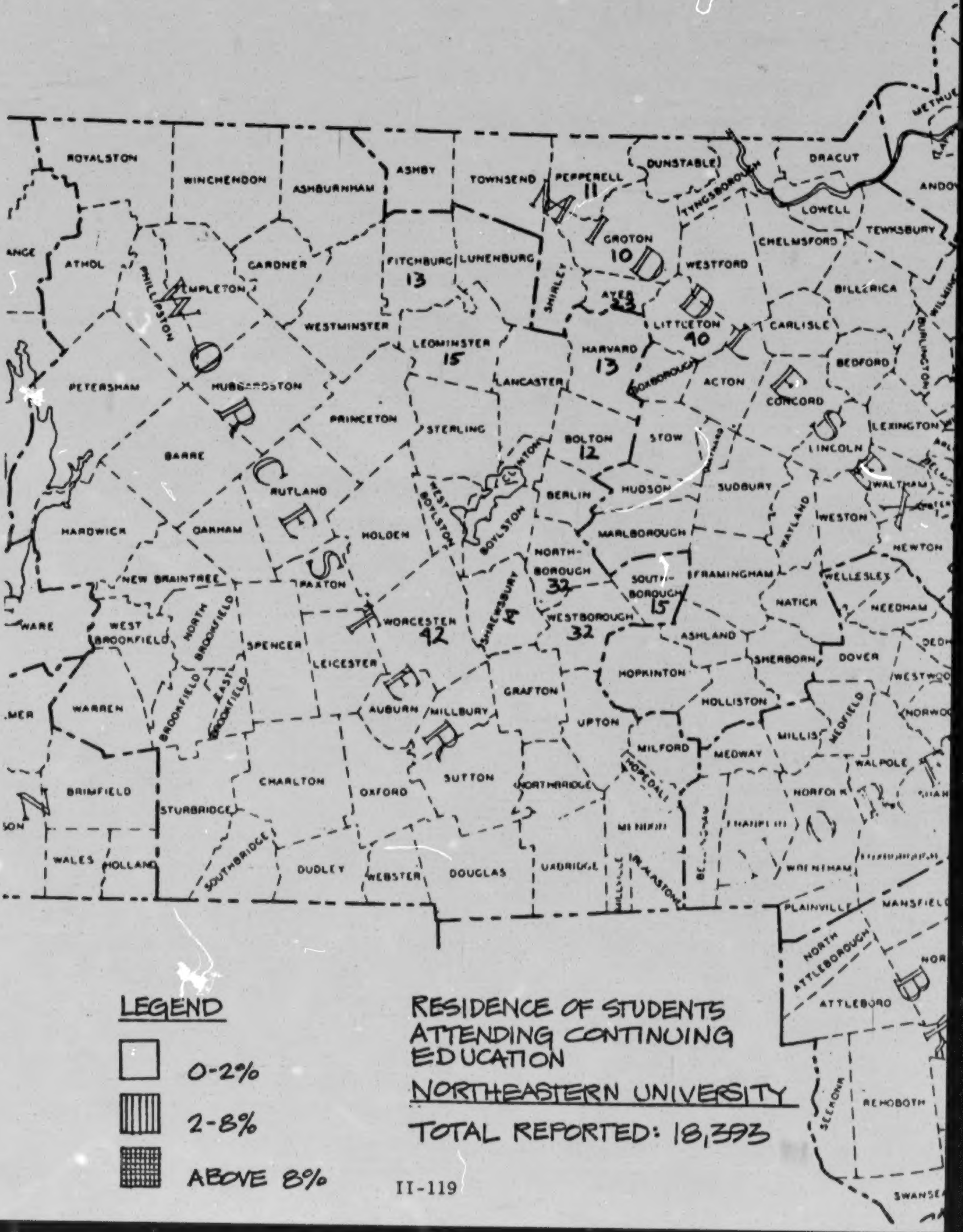
▦ ABOVE 8%


SUFFOLK
NORFOLK
PLYMOUTH
BRISTOL
BARNSTABLE
PLYMOUTH 50
WAREHAM 21
SANDWICH 6
BOURNE 4
MASHPEE 2
FALMOUTH 5
LEGEND
0-2%
2-8%
ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING CONTINUING EDUCATION.

NORTHEASTERN UNIV.

TOTAL REPORTED: 18,393


WORCESTER
MIDDLESEX
ROYALSTON
WINCHENDON
ASHBURNHAM
ASHBY
TOWNSEND
PEPPERELL
11
DUNSTABLE
TYNGSBOROUGH
DRACUT
ANDOV
METHUE
LOWELL
TEWKSBURY
CHELMSFORD
BILLERICA
WILMING
ATHOL
PHILLIPSTON
TEMPLETON
GARDNER
FITCHBURG
13
LUNENBURG
SHIRLEY
GROTON
10
WESTFORD
AYER
23
LITTLETON
40
CARLISLE
BURLINGTON
BEDFORD
WESTMINSTER
LEOMINSTER
15
HARVARD
13
BOXBOROUGH
ACTON
CONCORD
PETERSHAM
HUBBARDSTON
LANCASTER
PRINCETON
STERLING
BOLTON
12
STOW
LEXINGTON
LINCOLN
BARRE
CLINTON
RUTLAND
WEST BOYLSTON
BOYLSTON
BERLIN
HUDSON
SUDBURY
WALTHAM
WESTON
WAYLAND
HARDWICK
OAKHAM
HOLDEN
MARLBOROUGH
NEWTON
NORTHBOROUGH
32
SOUTHBOROUGH
15
FRAMINGHAM
WELLESLEY
NEW BRAINTREE
PAXTON
SHREWSBURY
14
WORCESTER
42
WESTBOROUGH
32
NATICK
NEEDHAM
WARE
WEST BROOKFIELD
NORTH BROOKFIELD
SPENCER
LEICESTER
ASHLAND
SHERBORN
DOVER
HOPKINTON
BROOKFIELD
EAST BROOKFIELD
WARREN
AUBURN
MILLBURY
GRAFTON
HOLLISTON
WESTWOOD
MEDFIELD
NORWOOD
UPTON
MILLIS
MILFORD
MEDWAY
WALPOLE
HOPEDALE
BRIMFIELD
STURBRIDGE
CHARLTON
OXFORD
SUTTON
NORTHBRIDGE
NORFOLK
MENDON
BELLINGHAM
FRANKLIN
WALES
HOLLAND
SOUTHBRIDGE
DUDLEY
WEBSTER
DOUGLAS
UXBRIDGE
MILLVILLE
BLACKSTONE
WRENTHAM
PLAINVILLE
MANSFIELD
NORTH ATTLEBOROUGH
ATTLEBORO
SEEKONK
REHOBOTH
SWANSEA
NOR

LEGEND

☐ 0-2%

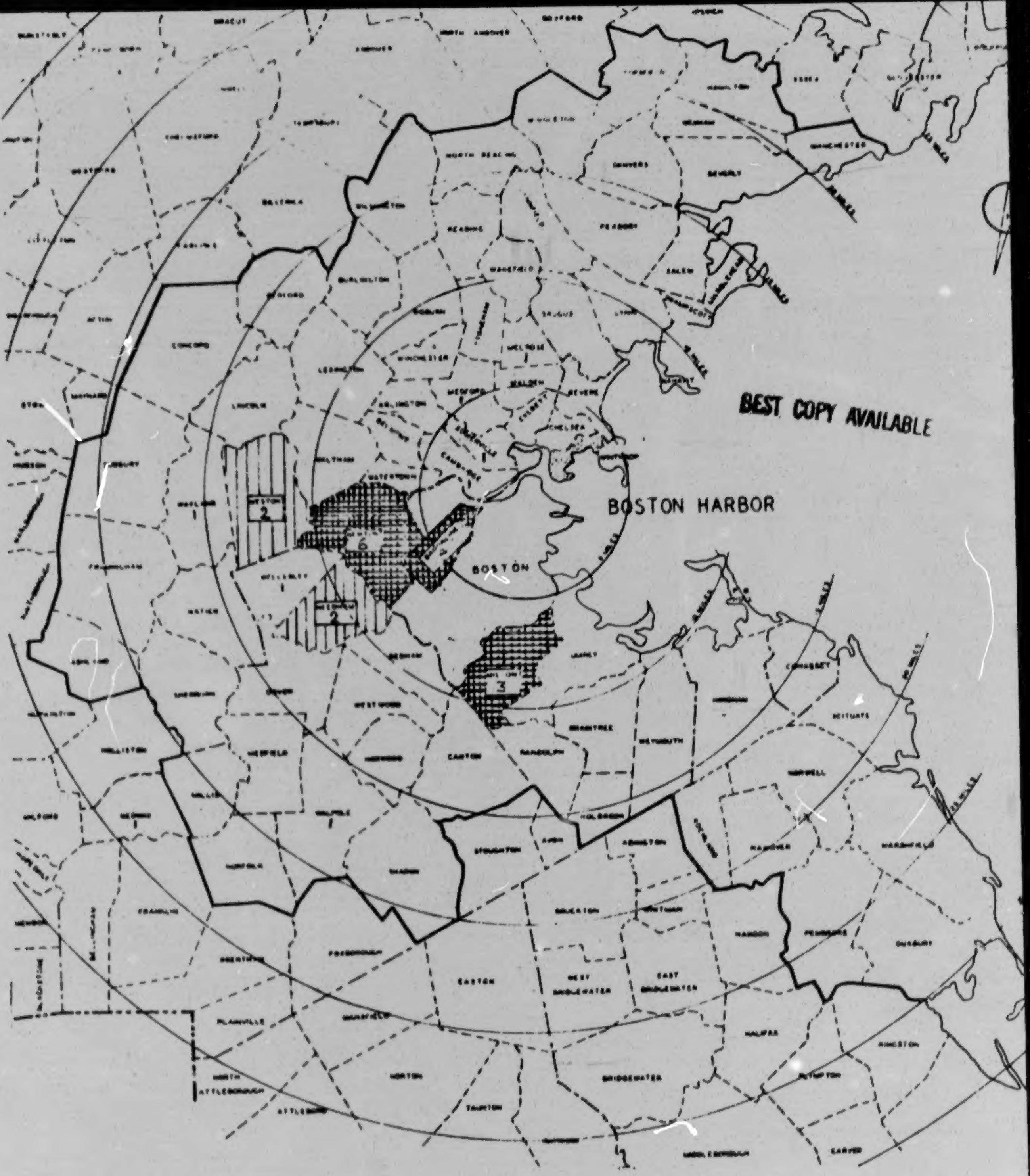
▥ 2-8%

▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING CONTINUING EDUCATION

NORTHEASTERN UNIVERSITY

TOTAL REPORTED: 18,393


BOSTON HARBOR
BOSTON
2
2
6
3
1
1
CONCORD
LINCOLN
LEXINGTON
WINCHESTER
MELROSE
MALDEN
REVERE
CHELSEA
WALTHAM
WATERTOWN
WELLESLEY
NATICK
DOVER
WESTWOOD
CANTON
RANDOLPH
BRAINTREE
WEYMOUTH
NORWOOD
STOUGHTON
SHARON
FOXBOROUGH
EASTON
BROCKTON
WEST BRIDGEWATER
EAST BRIDGEWATER
BRIDGEWATER
NORTON
TAUNTON
MIDDLEBOROUGH
NORTH ATTLEBOROUGH
PLAINVILLE
FRANKLIN
NORFOLK
HOLLISTON
SHERBORN
FRAMINGHAM
SUDBURY
ACTON
BURLINGTON
WOBURN
READING
WAKEFIELD
SAUGUS
LYNN
SALEM
PEABODY
DANVERS
BEVERLY
MANCHESTER
ESSEX
NORTH READING
BILLERICA
CHELMSFORD
HOLBROOK
ABINGTON
HANOVER
NORWELL
SCITUATE
COHASSET
MARSHFIELD
PEMBROKE
DUXBURY
KINGSTON
HALIFAX
CARVER

BEST COPY AVAILABLE

LEGEND

☐ 0-2%

▥ 2-8%

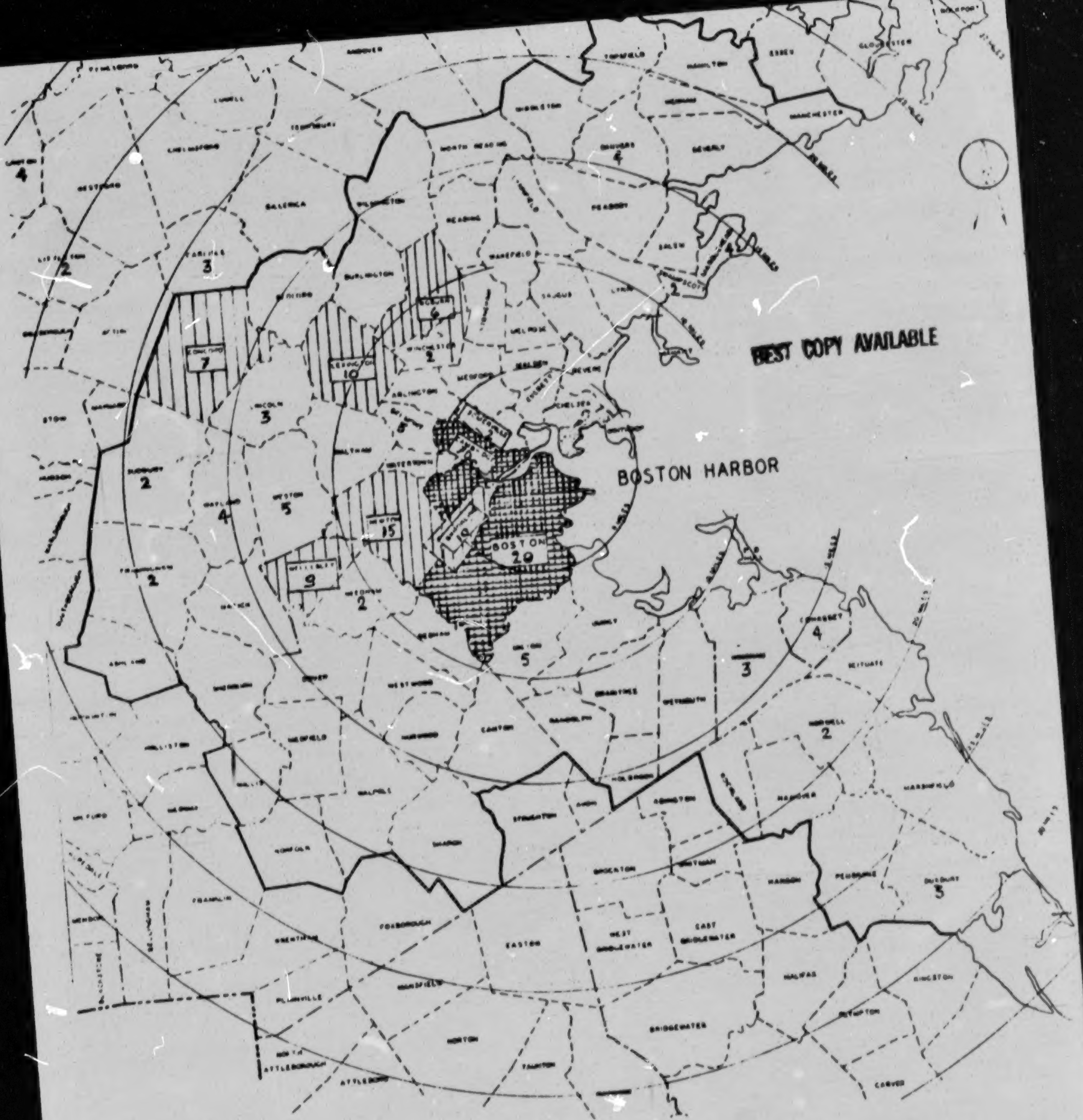
▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING CONTINUING EDUCATION

PINE MANOR COLLEGE

TOTAL REPORTED: 27

BEST COPY AVAILABLE


ANDOVER
TOPSFIELD
HAMILTON
ESSEX
GLOUCESTER
MANCHESTER
BEVERLY
DANVERS
4
MIDDLETON
NORTH READING
PEABODY
SALEM
LOWELL
TEWKSBURY
CHELMSFORD
WESTFORD
LITTLETON
4
2
BILLERICA
WILMINGTON
READING
WAKEFIELD
CARLISLE
3
BURLINGTON
BEDFORD
WOBURN
6
SAUGUS
LYNN
SWAMPSCOTT
2
MELROSE
WINCHESTER
2
CONCORD
7
LEXINGTON
10
MEDFORD
REVERE
ARLINGTON
CHELSEA
LINCOLN
3
BELMONT
8
STOW
SUDBURY
2
WAYLAND
4
WESTON
5
WALTHAM
WATERTOWN
NEWTON
15
BOSTON HARBOR
BOSTON
20
FRAMINGHAM
2
WELLESLEY
9
NEEDHAM
2
NATICK
ASHLAND
DOVER
DEDHAM
MILTON
5
QUINCY
COHASSET
4
HINGHAM
3
SCITUATE
WESTWOOD
BRAINTREE
WEYMOUTH
NORWELL
2
HOLLISTON
MEDFIELD
NORWOOD
CANTON
RANDOLPH
HOLBROOK
MARSHFIELD
MILLIS
MEDWAY
WALPOLE
STOUGHTON
ABINGTON
ROCKLAND
HANOVER
NORFOLK
SHARON
BROCKTON
WHITMAN
HANSON
PEMBROKE
DUXBURY
3
FRANKLIN
FOXBOROUGH
WRENTHAM
EASTON
WEST BRIDGEWATER
EAST BRIDGEWATER
HALIFAX
KINGSTON
PLAINVILLE
MANSFIELD
BRIDGEWATER
PLYMPTON
NORTH ATTLEBOROUGH
ATTLEBORO
NORTON
TAUNTON
CARVER

LEGEND

☐ 0-2%

▥ 2-8%

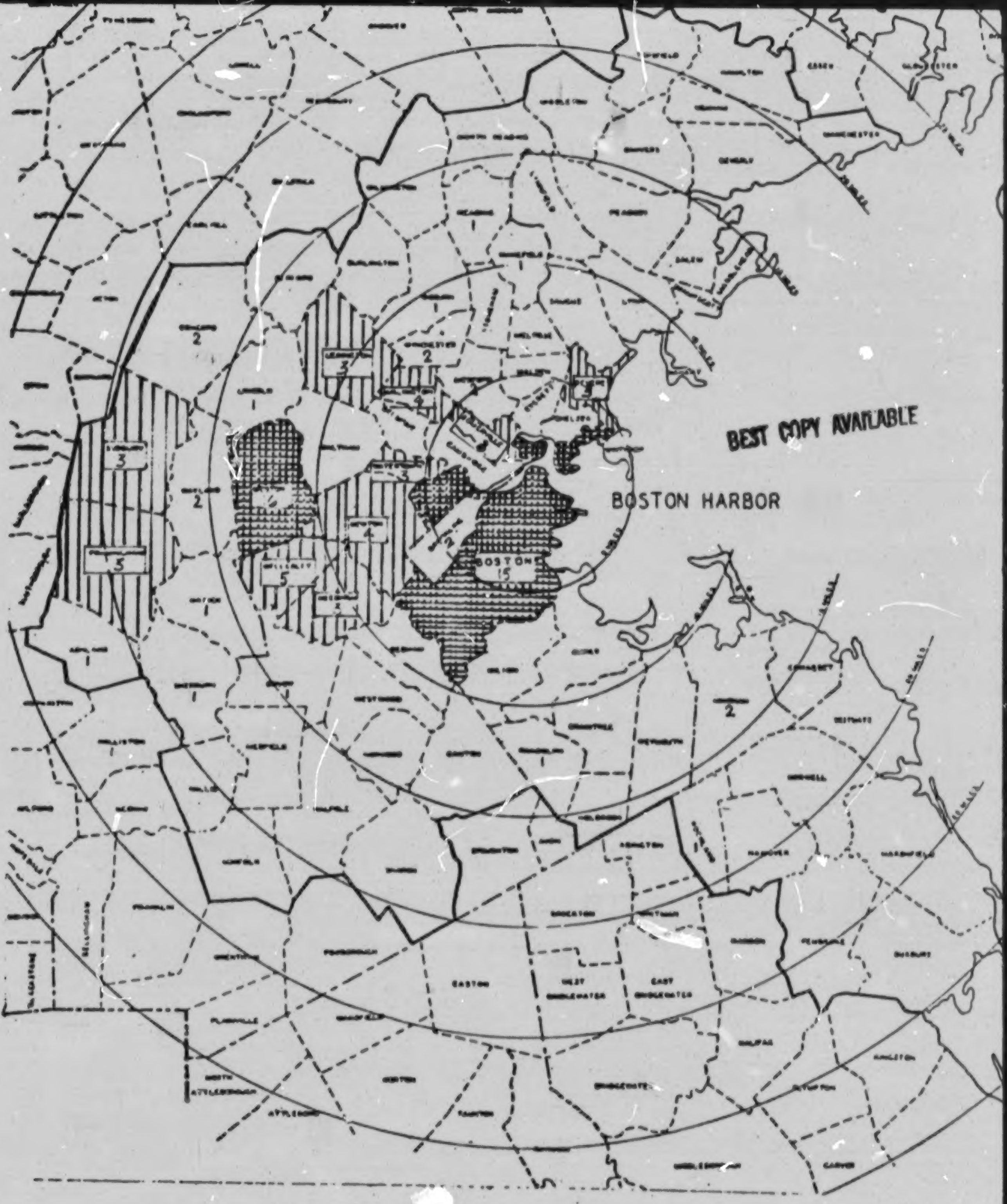
▦ ABOVE 8%

RESIDENCE OF STUDENTS
ATTENDING RADCLIFFE
INSTITUTE

RADCLIFFE COLLEGE

TOTAL REPORTED: 254
NOTE: TOWNS WITH
ONE STUDENT ARE OMITTED

BEST COPY AVAILABLE


BOSTON HARBOR
BOSTON
15

LEGEND

☐ 0-2%

▥ 2-8%

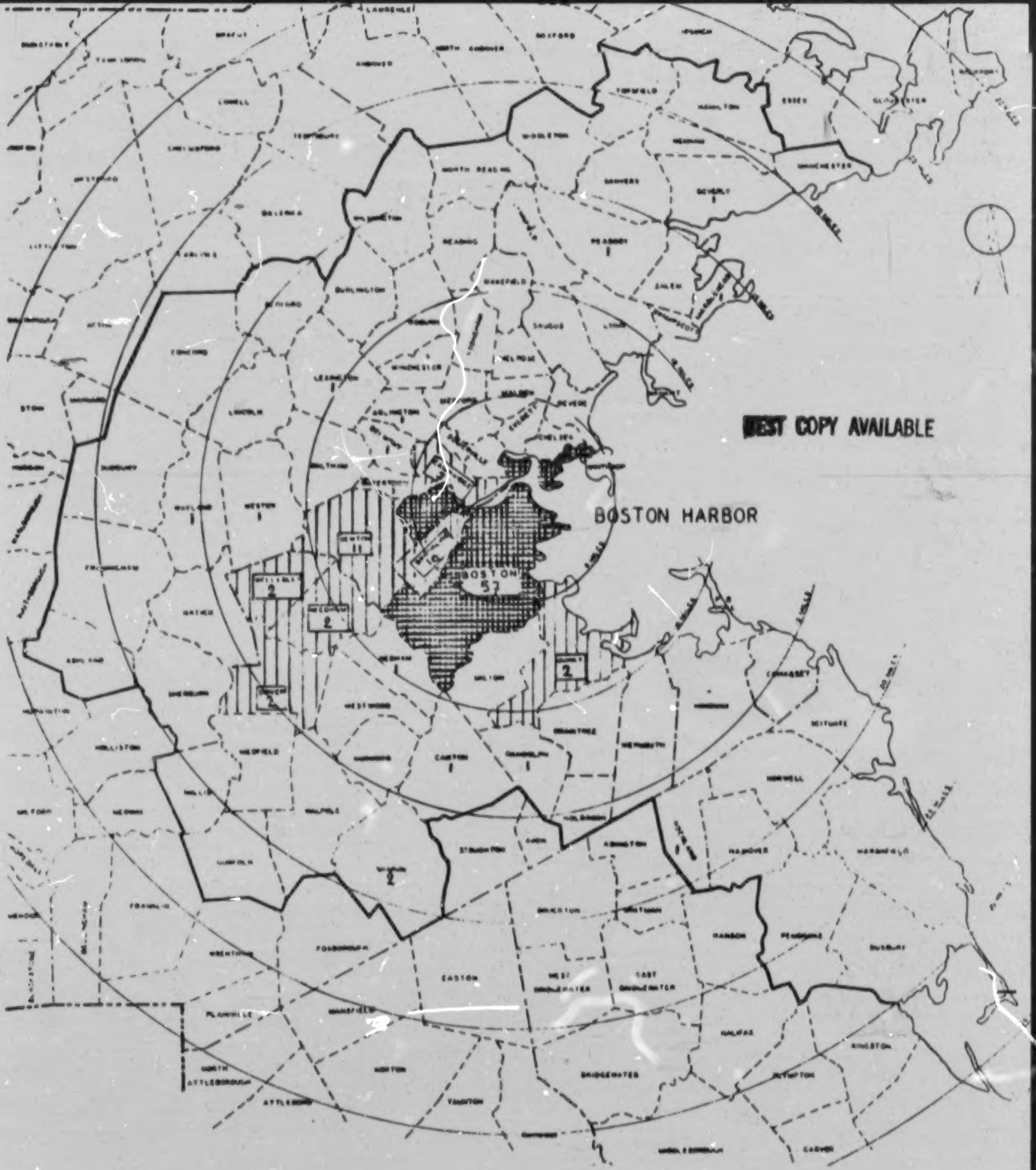
▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING CONTINUING EDUCATION

REGIS COLLEGE

TOTAL REPORTED: 100

BEST COPY AVAILABLE


BOSTON HARBOR
BOSTON
57
NEWTON
11
12
2
2
2
2
2

LEGEND

☐ 0-2%

▥ 2-8%

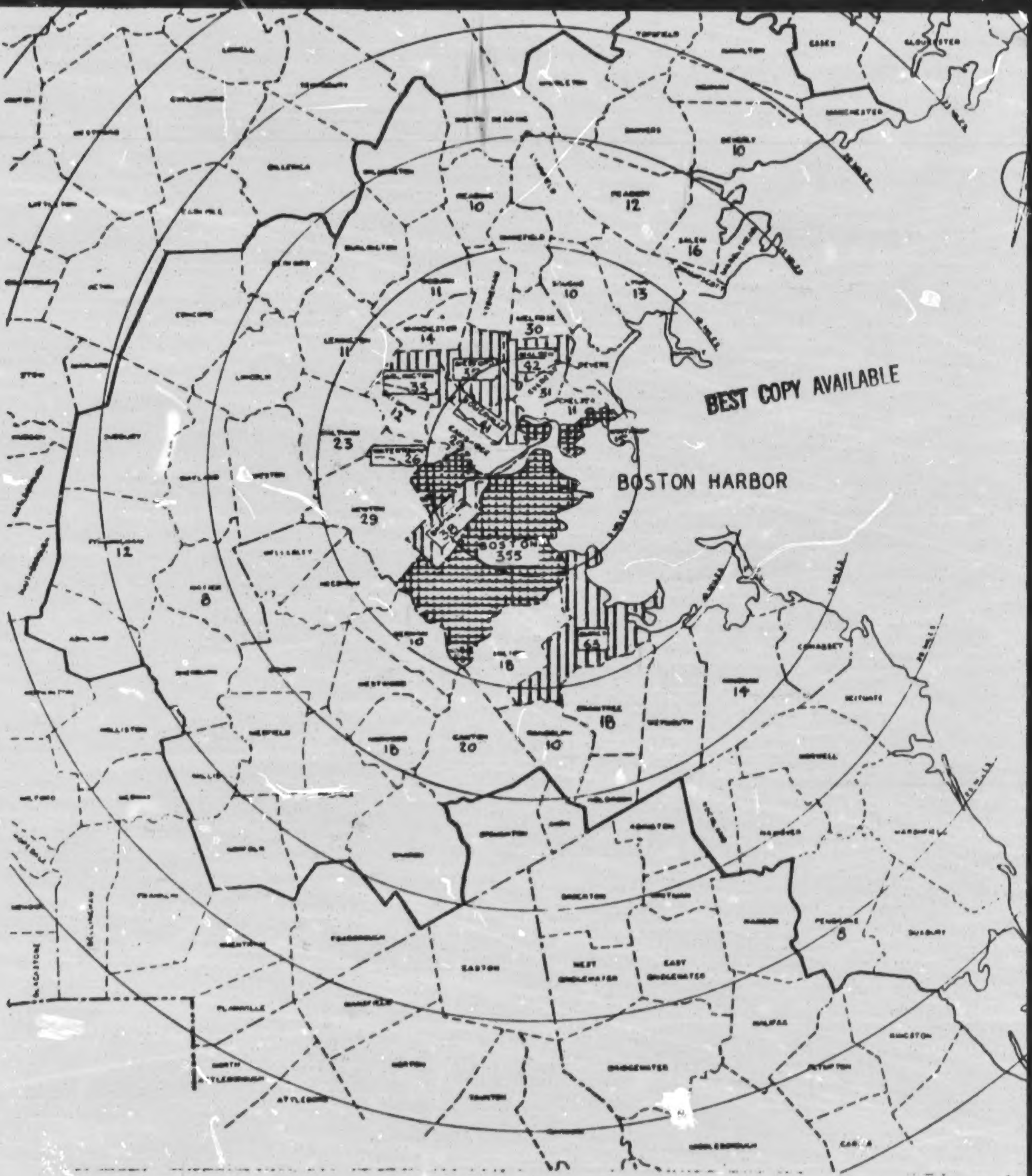
▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING CONTINUING EDUCATION

SIMMONS COLLEGE

TOTAL REPORTED: 113

BEST COPY AVAILABLE


BOSTON HARBOR
BOSTON
355
10
12
16
10
11
10
13
30
14
42
31
35
11
23
26
29
12
8
10
18
62
14
18
16
20
10
8

LEGEND

☐ 0-2%

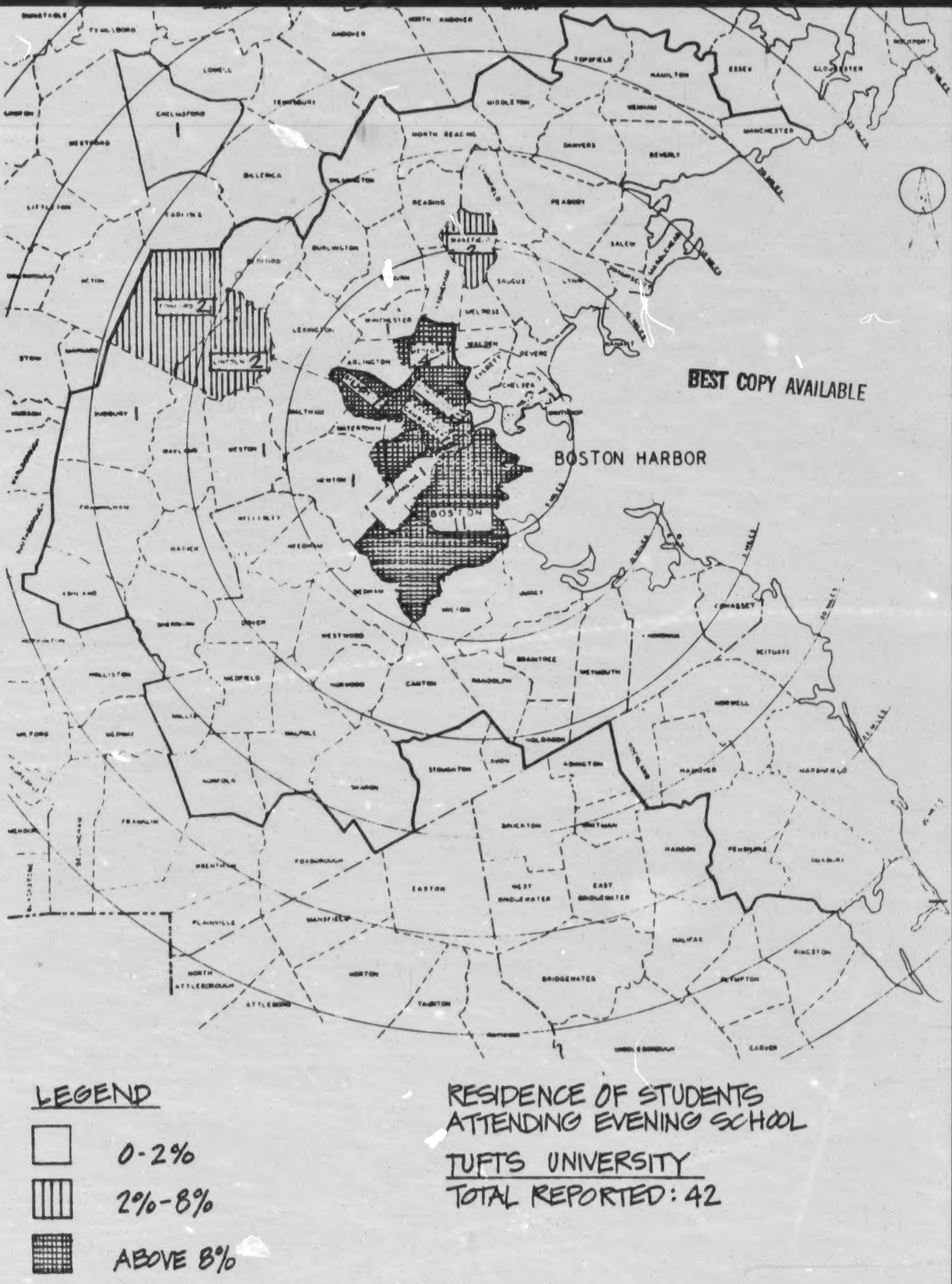
▥ 2-8%

▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING CONTINUING EDUCATION

SUFFOLK UNIVERSITY

TOTAL REPORTED: 1562
NOTE: TOWNS WITH LESS THAN SEVEN STUDENTS ARE OMITTED.

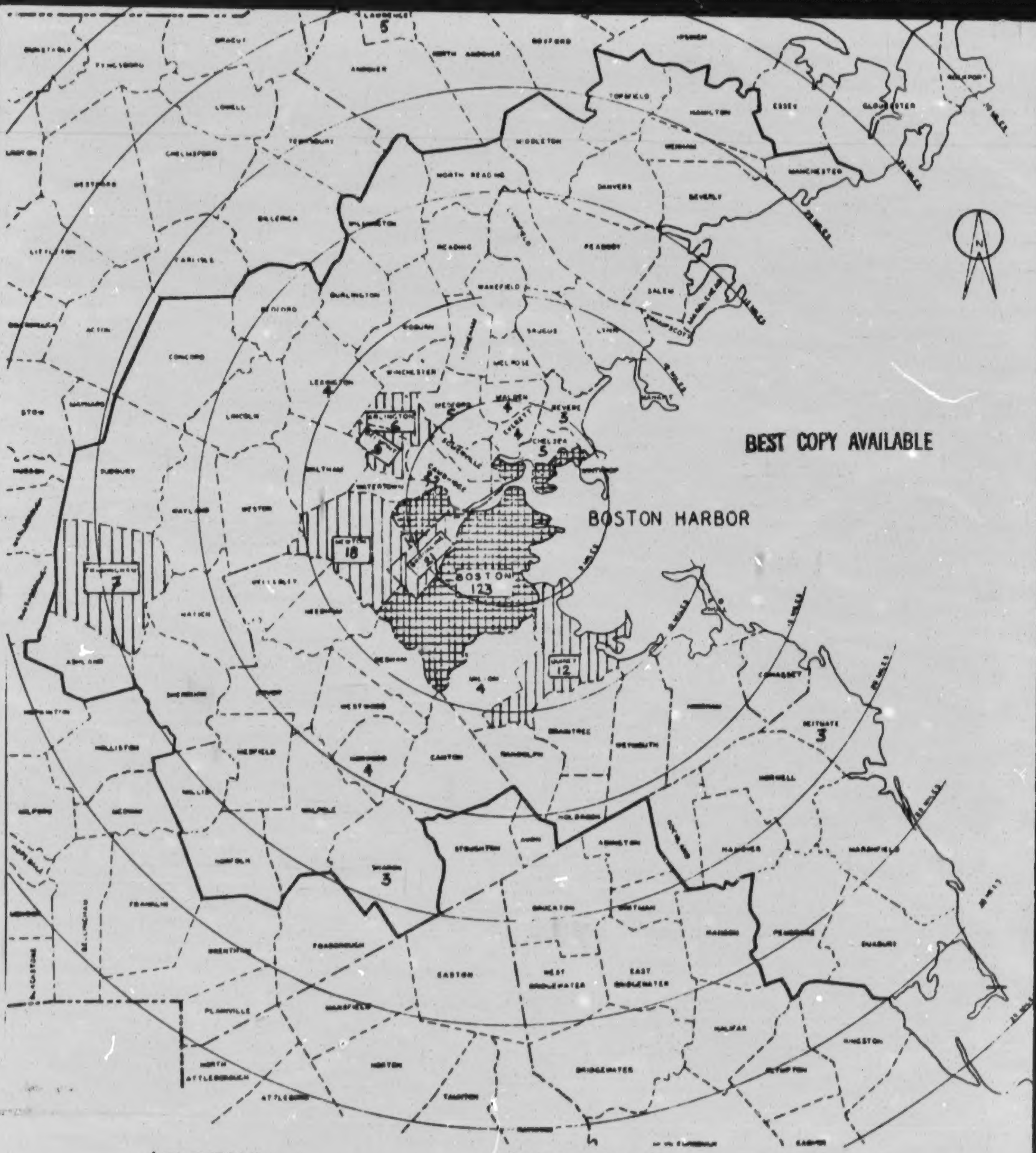

BOSTON HARBOR
BOSTON 11
CONCORD 2
LINCOLN 2
WAKEFIELD 2
CHELMSFORD 1
SUDBURY 1
WESTON 1
NEWTON 1
LEGEND
☐ 0-2%
▥ 2%-8%
▦ ABOVE 8%

BEST COPY AVAILABLE

RESIDENCE OF STUDENTS ATTENDING EVENING SCHOOL

TUFTS UNIVERSITY

TOTAL REPORTED: 42


BOSTON HARBOR
BOSTON
123
18
12
7
5
4
3
N

BEST COPY AVAILABLE

LEGEND

□ 0-2%

▥ 2-8%

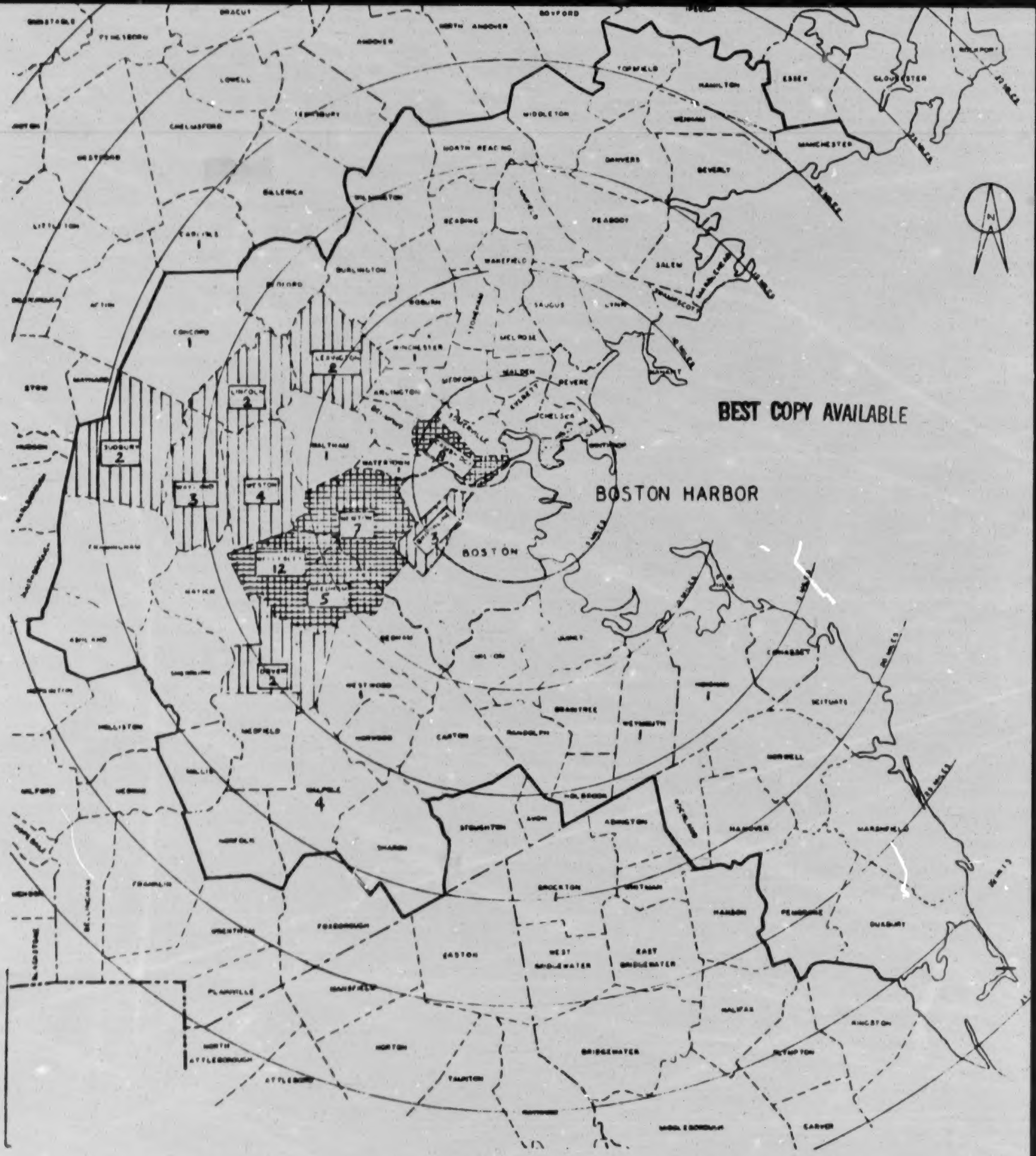
▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING PART TIME IN REGULAR COLLEGE PROGRAM

UNIVERSITY OF MASS./BOSTON

TOTAL REPORTED: 317

NOTE: TOWNS WITH LESS THAN TWO STUDENTS ARE OMITTED.


CARLISLE
1
CONCORD
1
LEXINGTON
2
LINCOLN
2
SUDBURY
2
WAYLAND
3
WESTON
4
WALTHAM
1
WINCHESTER
1
NEWTON
7
WELLESLEY
12
NEEDHAM
5
DOVER
2
WESTWOOD
1
WALPOLE
4
WEYMOUTH
1
HINGHAM
1
BOSTON HARBOR
BOSTON
N

BEST COPY AVAILABLE

LEGEND

☐ 0-2%

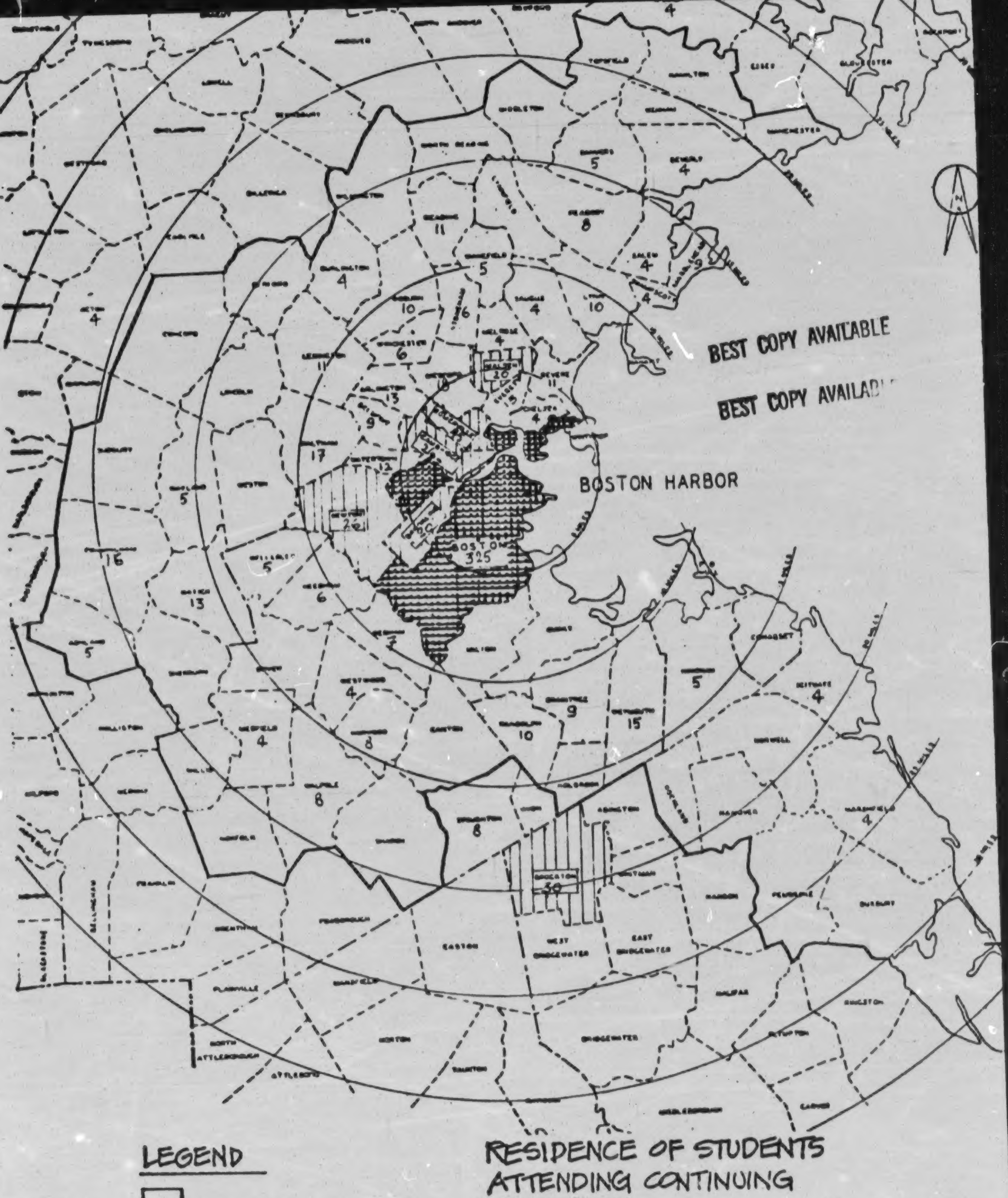
▥ 2-8%

▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING PART TIME IN REGULAR COLLEGE PROGRAM

WELLESLEY COLLEGE

TOTAL REPORTED: 63


BOSTON HARBOR
BOSTON
325

BEST COPY AVAILABLE

BEST COPY AVAILABL

LEGEND

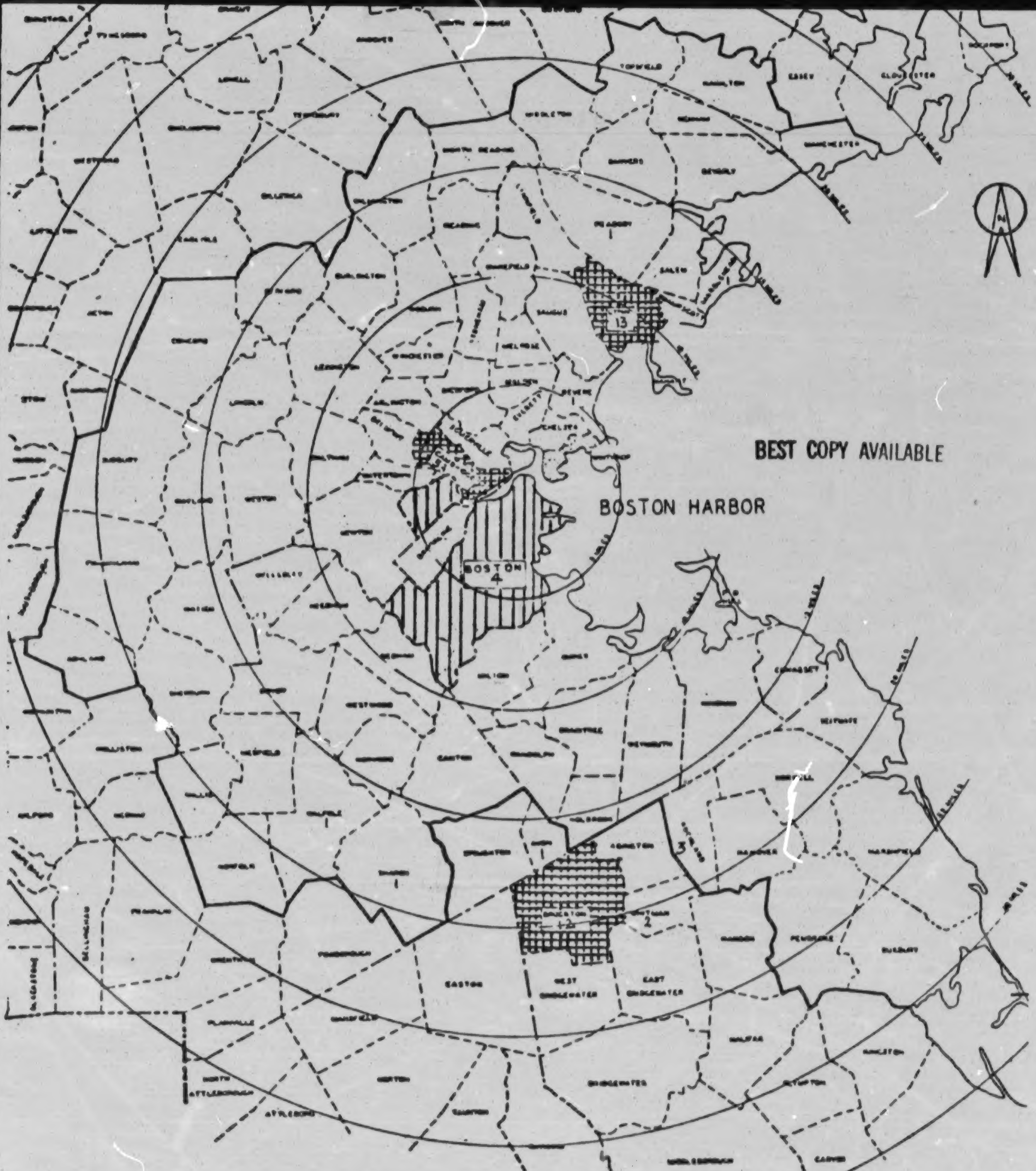
☐	0-2%
▥	2-8%
▦	ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING CONTINUING EDUCATION.

WENTWORTH INSTITUTE

TOTAL REPORTED: 1011
NOTE: TOWNS WITH LESS THAN FOUR STUDENTS ARE OMITTED

BEST COPY AVAILABLE


BOSTON HARBOR
BOSTON
4
13
1
1
1
3
2
+2
1

LEGEND

☐ 0-2%

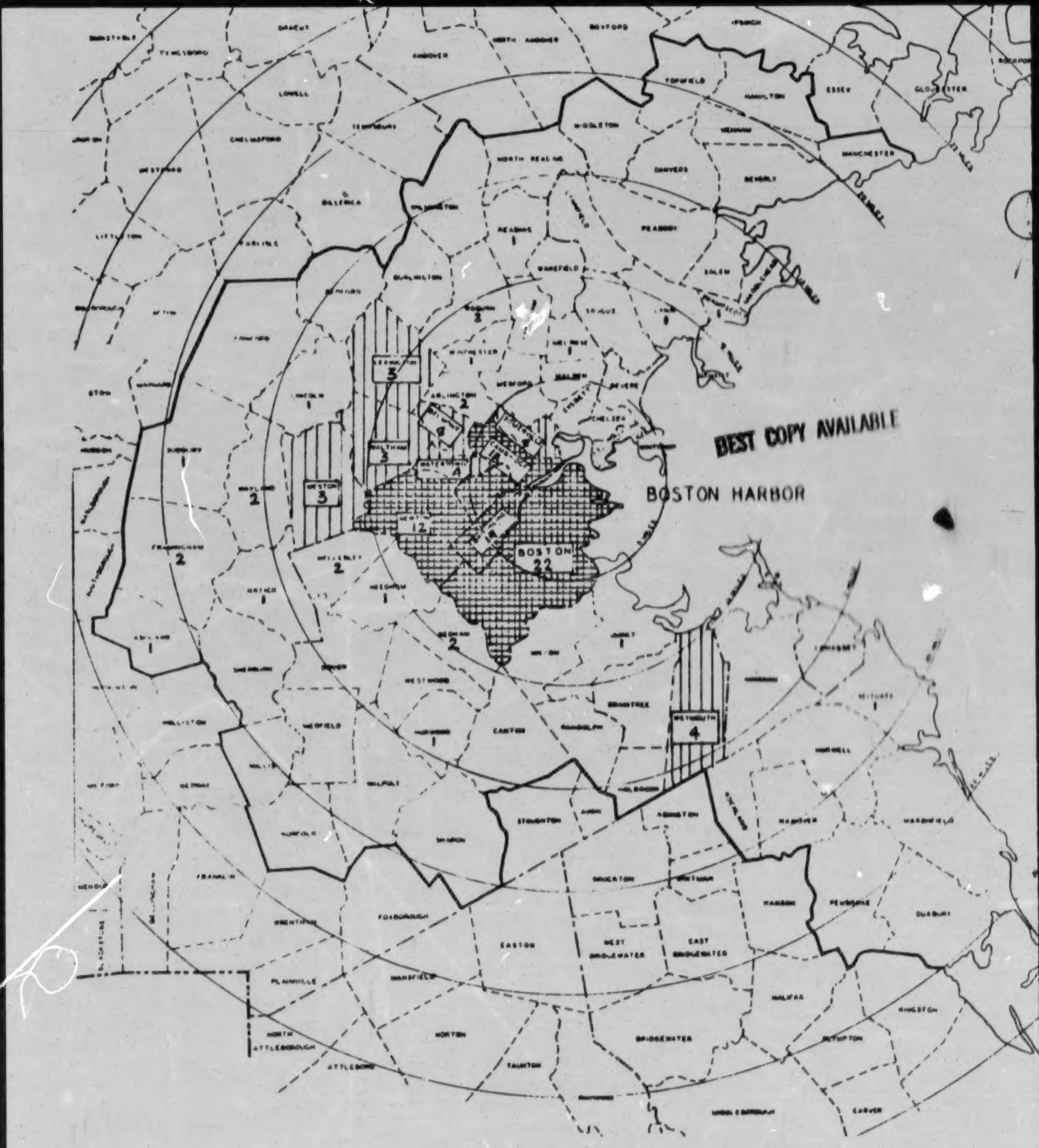
▥ 2-8%

▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING CONTINUING EDUCATION

WHEELOCK COLLEGE

TOTAL REPORTED: 135


BOSTON HARBOR
BOSTON
22
LEXINGTON
5
ARLINGTON
2
WALTHAM
3
WESTON
3
WATERTOWN
4
NEWTON
12
SUDBURY
1
WAYLAND
2
FRAMINGHAM
2
WELLESLEY
2
NATICK
1
NEEDHAM
1
DEDHAM
2
ASHLAND
1
LINCOLN
1
READING
1
WINCHESTER
1
WEYMOUTH
4
BRAINTREE
NORWOOD
1
STOUGHTON
SHARON
CANTON
RANDOLPH
EASTON
BROCKTON
HANOVER
MARSHFIELD
SCITUATE
1
DUXBURY
PEMBROKE
HANSON
KINGSTON
HALIFAX
PLYMPTON
BRIDGEWATER
WEST BRIDGEWATER
EAST BRIDGEWATER
TAUNTON
NORTON
MANSFIELD
ATTLEBORO
NORTH ATTLEBOROUGH
PLAINVILLE
FOXBOROUGH
FRANKLIN
WRENTHAM
WALPOLE
MEDFIELD
WESTWOOD
HOLLISTON
BEVERLY
SALEM
PEABODY
DANVERS
GLOUCESTER
MANCHESTER
ESSEX
HAMILTON
TOPSFIELD
WENHAM
BOXFORD
IPSWICH
NORTH ANDOVER
ANDOVER
LOWELL
DRACUT
TEWKSBURY
CHELMSFORD
BILLERICA
WILMINGTON
NORTH READING
MIDDLETON
WAKEFIELD
BURLINGTON
BEDFORD
CONCORD
ACTON
LITTLETON
WESTFORD
CARLISLE
STOW
MAYNARD
HUDSON
TYNGSBORO
SAUGUS
MELROSE
MALDEN
MEDFORD
REVERE
CHELSEA
EVERETT
LYNN
HOLBROOK
ABINGTON
AVON
ROCKLAND
MIDDLEBOROUGH
CARVER
RAYNHAM

BEST COPY AVAILABLE

LEGEND

☐ 0-2%

▥ 2-8%

▦ ABOVE 8%

RESIDENCE OF STUDENTS ATTENDING PART TIME IN REGULAR COLLEGE PROGRAM

WHEELOCK COLLEGE

TOTAL REPORTED: 124

BEST COPY AVAILABLE

B. Trends in Enrollments and Current Enrollments

DISCUSSION. II-133
- Current Enrollments. II-133
- Trends in Enrollments in Degree-Granting Institutions II-136
- Trends in Enrollments in Periphery Institutions. . II-136
- Trends by Geographic Service Area. II-137
  - Key Events List and Combined Area Trend Charts . II-138

1. Numerical Data by Institution and Region: Enrollment Totals for Fall 1972 . . . . II-167
   - Introduction II-167
   - Methodology for Compilation of Enrollment Totals II-168
   - Table: Enrollment Totals by Substate Region and Institution. II-170

2. Introduction and Notes on Institutional Trend Charts II-177

3. Trend Charts for Each Institution II-179

DISCUSSION OF TRENDS IN ENROLLMENTS AND CURRENT ENROLLMENTS

Current Enrollments

Headcount enrollments or number of people in continuing and part-time programs in the degree-granting institutions considered totalled 110,270 in the fall of 1972. Most of these enrollments, 90,931, were in continuing education or evening divisions as separate from part-time study in full-time programs. Public enrollments were 59,430 (50,537 in continuing education and 8,893 in part-time programs); while private enrollments were 50,840 (40,394 in continuing education and 10,446 in part-time programs). Totals are not available for peripheral institutions across the state since some did not submit data.

	HEADCOUNT OF ENROLLED STUDENTS IN CONTINUING EDUCATION			HEADCOUNT OF STUDENTS ENROLLED PART-TIME IN FULL-TIME PROGRAM		
	Under grad	Grad	Total	Under grad	Grad	Total
U. Mass.	1,533	59	1,592	501	2,495	2,996
State Colleges	6,627	11,357	17,984	667	3,660	4,327
Comm. Colleges	25,497	--	25,497	508	--	508
Other	5,324	140	5,464	1,052	10	1,062
PUBLIC TOTAL	38,981	11,556	50,537	2,728	6,165	8,893
PRIVATE TOTAL	37,786	2,608	40,394	1,437	9,009	10,446
TOTAL:	76,767	14,164	90,931	4,165	15,174	19,339

Trends in Enrollments

Trends in student enrollments are analyzed for the following reasons: first, to place in perspective the current programs and services with their development in the past; second, to illuminate areas of program growth and of competition among types of institutions.

To compare trends in enrollments over the period from 1963 to 1972, Fall term headcounts were graphed for both continuing studies programs and part-time students in full-time programs. While each school's enrollment is charted separately, area trends are first presented for continuing studies and part-time programs. Among the general trends visible for this data are:

1) Enrollments of part-time-students-in-full-time-programs are low and rose very slightly over the ten year period. In 1972 the total number of part-time students (with 8 or less credit/hours per semester) was about 19,000 statewide. Most schools experienced a very slight increase in part-time enrollments over the 10 year period. A major exception is the fall in enrollments in graduate programs at Northeastern.

2) Enrollments of continuing education students rose substantially over the ten year period. In 1972 the total number of continuing education students was 90,931 statewide. Enrollment trends varied significantly, however, among types of institutions and across the geographic service areas. Following are generalizations from the institutional and area trend charts for continuing studies programs.

First, the enrollment increases, particularly over the last few years, are largely accounted for by growth in public programs. The community colleges opening over the last ten years have expanded enrollments each year to enrollments now totalling over 25,000 across the State. State colleges have also expanded, to about 18,000 as well as U./Mass.-Amherst to 1600.

Second, enrollments in private colleges and universities have typically declined in the last few years. In many cases the decline is explained by a drop in undergraduate enrollments, while graduate enrollments have risen.

Thus there is clear evidence that enrollments in public programs have expanded at the expense of private college programs. Even when the private programs have not declined but remained stable, it is clear that the growth in a given geographic service area has been at the public institution. It is important in examining these trends in public/private competition to consider a) who first started a given program in a given subject, so "important" events are noted to assist in interpretation, and b) whether the clienteles served by public programs are from significantly different population groups than those in private programs. The answer to question b) is no (see Section III.A.6., student questionnaire response analysis), since the clienteles are nearly identical in both.

The primary competition between public and private institutions has been at the undergraduate level: the private institutions in several cases have seen a drop in undergraduate and a rise in graduate enrollments. More new public graduate programs would probably reduce graduate enrollments as well.

The public/private interrelationships become more apparent when examining trends in specific geographic service areas. There are three areas in the state where private programs have been historically strong: Springfield, Worcester, and Boston. In Springfield the enrollments of all three private institutions fell, while enrollments in the publics rose. Overall totals would have remained stable for the

Springfield area but for the rapid growth of Springfield Technical Community College. Worcester area continuing studies programs were relatively stable in terms of enrollments, again with the exception of a public community college: Quinsigamond. The Boston area has seen relatively stable enrollment levels over the last several years.

Intense public-private competition is revealed in the Burlington, Framingham and Lynn/Salem areas. Northeastern opened branch campuses in the mid 1960's in Burlington, Framingham and Lynn, responding to the need for programs in these then underserved areas. In the late 1960's public campuses were opened which have increased enrollments concurrently with decreases in Northeastern enrollments. In Burlington/Bedford, Middlesex Community College has experienced rapid growth while Northeastern's University College and Lincoln College have, with the exception of the last year, seen enrollment declines in the relevant years of competition. Competition for the Framingham branch campus of Northeastern has come from Framingham State; for the Lynn branch campus, from North Shore Community College and Salem State. Similar enrollment trends can be traced in these areas.

There was a tradition of continuing education in these metropolitan areas with both public and private institutions operating for many years. Enrollments in other geographic areas, however, have shown rapid overall growth where private schools ten years ago were not serving continuing education students. When public campuses were opened enrollment increased rapidly. The Fitchburg/Gardner area experienced rapid increases in enrollments, due to programs at the two public campuses, Mt. Wachusett and Fitchburg State. Andover/Lowell has also seen expansion of enrollments due to programs opening up at Northern Essex and Lowell State. The one private program in the area, Merrimack, had an enrollment decline, as did Lowell Tech. Enrollments in programs in Southeast Massachusetts also rose due to opening of public programs.

Third, enrollment increases varied by type of program. It has already been seen that graduate enrollments increased in many schools, particularly in private, when competitive undergraduate public programs were opened in the area. This is particularly true in the Springfield area, but also in North Adams. It appears that state colleges with a traditional focus on education programs have had only slight increases in enrollments, while state colleges with a broader program have seen rapid increases (Westfield, North Adams, and Worcester vs. Fitchburg, Framingham, Lowell, Bridgewater, and Boston State). Finally, technical programs have seen enrollment decreases at Northeastern (Lincoln College) and at Lowell Tech. Worcester Polytech showed only a slight enrollment increase in the last year, while Springfield Tech Community College showed a marked increase.

Fourth, trends in enrollments appeared to have a noticeable break in 1969 or 1970. Enrollments at private institutions in particular began to fall. Other enrollment trends upwards slackened off. This effect was less noticeable for the public community colleges. Several reasons may be behind this break: First, the backoff trends may be seen for full-time undergraduate and graduate enrollments across the country.

Some of the same factors may apply to continuing education. There was probably a degree of disillusionment about education with the press of student demonstrations, etc. But more importantly, as the economy began to suffer in those years, the incentives of continuing education for job and financial rewards were lowered. Firms which had been supporting students part-time under government contract write-offs decreased the amount of their subsidies. Students on their own saw less value in continuing education and had fewer resources to pay for programs in the face of higher unemployment rates and rising costs. The enrollment effects were again felt most strongly in the private institutions which charge the highest tuitions and least in the public community colleges. The enrollments in technical subjects were most affected by the faltering job market, as in Northeastern's Lincoln College and graduate engineering programs.

Trends in Enrollments in Periphery Institutions

Trends in enrollments for periphery institutions are presented in Section II.K.

There are instances of negative effects of competition from public programs on the proprietaries; the closure of Bryant-McIntosh in the Lynn/Salem area, Lowell Commercial College in the Andover/Lowell area and others. The major impact on proprietaries will not be felt however until the opening of comparable public programs in Boston, the center of activities of proprietary institutions.

Continuing education divisions, although showing large increases in enrollments, do not appear to have caused any fall in enrollments in adult education programs in the public schools. Even in the areas surrounding Middlesex, North Shore Community College and Framingham State, enrollments in adult education programs have risen. North Shore and Middlesex in particular offer many courses of a noncredit nature comparable to adult education courses. The fact that enrollments in noncredit courses could increase in all programs is indicative of the nationwide trend to increasing participation in non-credit adult education. In the Boston area both public and private institutions appear to have refrained from offering noncredit courses in the face of the two highly successful independent adult centers in Boston and Cambridge.

TRENDS BY GEOGRAPHIC SERVICE AREA

Key Events List and Combined Area Trend Charts

Code for "Type" in Listing of Events Useful in Interpreting Area Trend Charts:

STC	Satellite Teaching Center
BC	Branch Campus
cert.	Certificate
AA	Associate of Arts
AS	Associate of Science
BA	Bachelor of Arts
BS	Bachelor of Science
BBA	Bachelor of Business Administration
BGS	Bachelor of General Studies
BLS	Bachelor of Liberal Studies
BFA	Bachelor of Fine Arts
BSET	Bachelor of Science in Engineering Technology
BST	Bachelor of Science in Technology
BAS	Bachelor of Applied Science
BSE	Bachelor of Science in Education
MA	Master of Arts
MS	Master of Science
MBA	Master of Business Administration
MST	Master of Science in Teaching
MEd	Master of Education
MAS	Master of Arts in Teaching

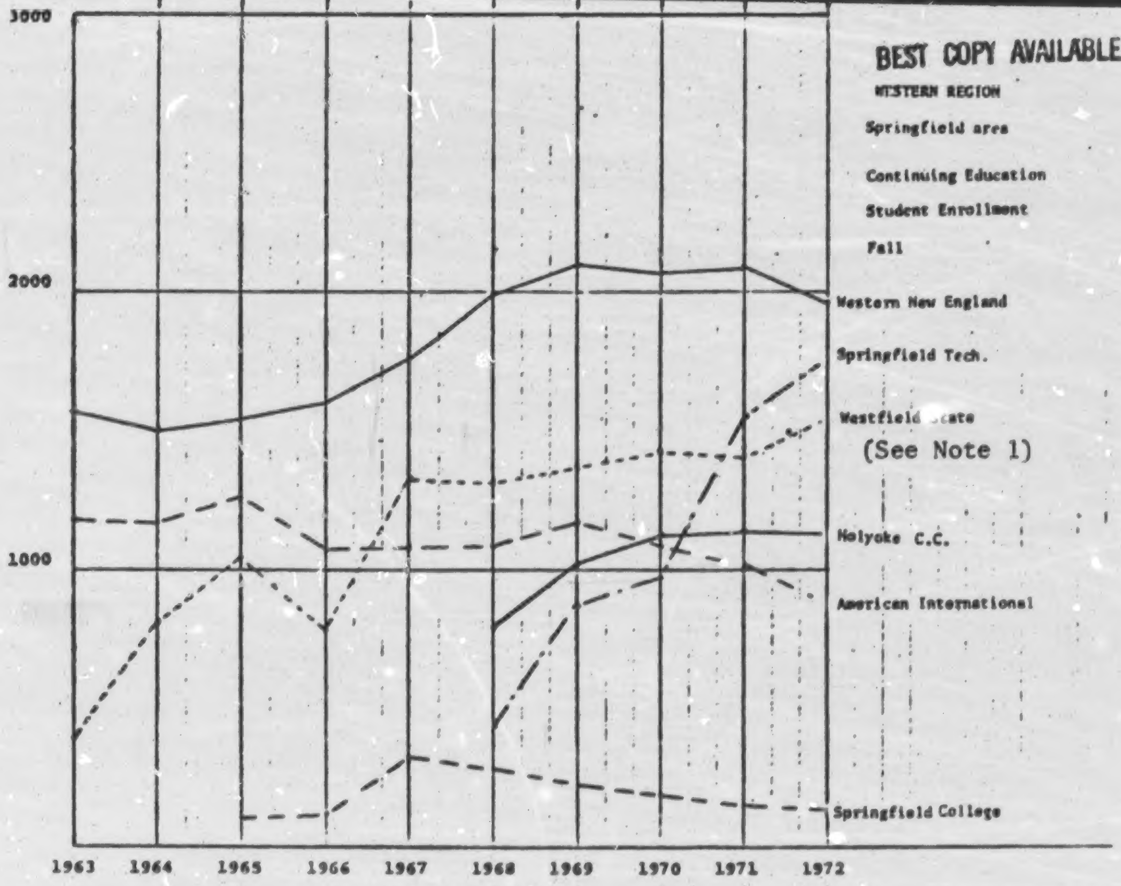
LISTING OF EVENTS USEFUL IN INTERPRETING AREA TREND CHARTS

SPRINGFIELD AREA

Year	School	Program	Type
1967	American Int'l.	Westover	MBA/BC
1967	Springfield Tech.	Data Processing	AS
1967	Springfield Tech.	Computer Programming	AS
1967	Springfield Tech.	Electronic Technology	AS
1967	Springfield Tech.	Machine and Tool	AS
1967	Springfield Tech.	Mechanical Technology	AS
1967	Springfield Tech.	Fire Science	AS
1968	American Int'l.	Business Administration	BBA
1968	American Int'l.	Physics	MST
1968	Westfield	Elementary	MEd
1968	Westfield	Secondary	MEd
1968	Westfield	Special	MEd
1968	Westfield	Counseling	MEd
1968	Westfield	Reading	MEd
1968	Westfield	School Psychology	MEd
1968	Westfield	English	MEd
1968	Westfield	History	MEd
1968	Westfield	Mathematics	MEd
1968	Springfield Tech.	Executive Secretarial	AS
1968	Springfield Tech.	Engineering Technology	AS
1968	Springfield Tech.	Law Enforcement	AS
1969	Springfield Tech.	Accounting	AS
1970	American Int'l.	Liberal Studies	AS
1970	Holyoke C.C.	Early Childhood	AS
1970	Westfield	Vocational Education	MEd
1970	Springfield Tech.	Management	AS
1971	American Int'l.	Foreign Languages	MAT
1971	Holyoke C.C.	Westover LEEP	BC
1971	Western New England	Law Enforcement	BS
1971	Westfield	Secondary	MEd
1971	Westfield	Foreign Languages	MEd
1971	Westfield	In-service Teachers	STC
1971	Springfield Tech.	Palmer	STC
1971	Springfield Tech.	Westover Fire Science	BC
1971	Springfield Tech.	Nursing--Springfield Hospital	BC
1971	Springfield Tech.	Banking	AS
1971	Springfield Tech.	Environmental Technology	AS
1972	Westfield	Urban	MEd
1972	Westfield	Westover AFB	BC
1972	Springfield Tech.	Marketing	AS
1972	Holyoke C.C.	Berkshire C.C. Corrections	STC
1972	Holyoke C.C.	Wistariahurst Museum	STC
1972	Holyoke C.C.	Acme Chain Corporation	STC

[1] The enrollment trend chart for Westfield State College (Continuing Education) does not include special graduate courses, the enrollment of which totalled 93 in fall 1972.

BEST COPY AVAILABLE



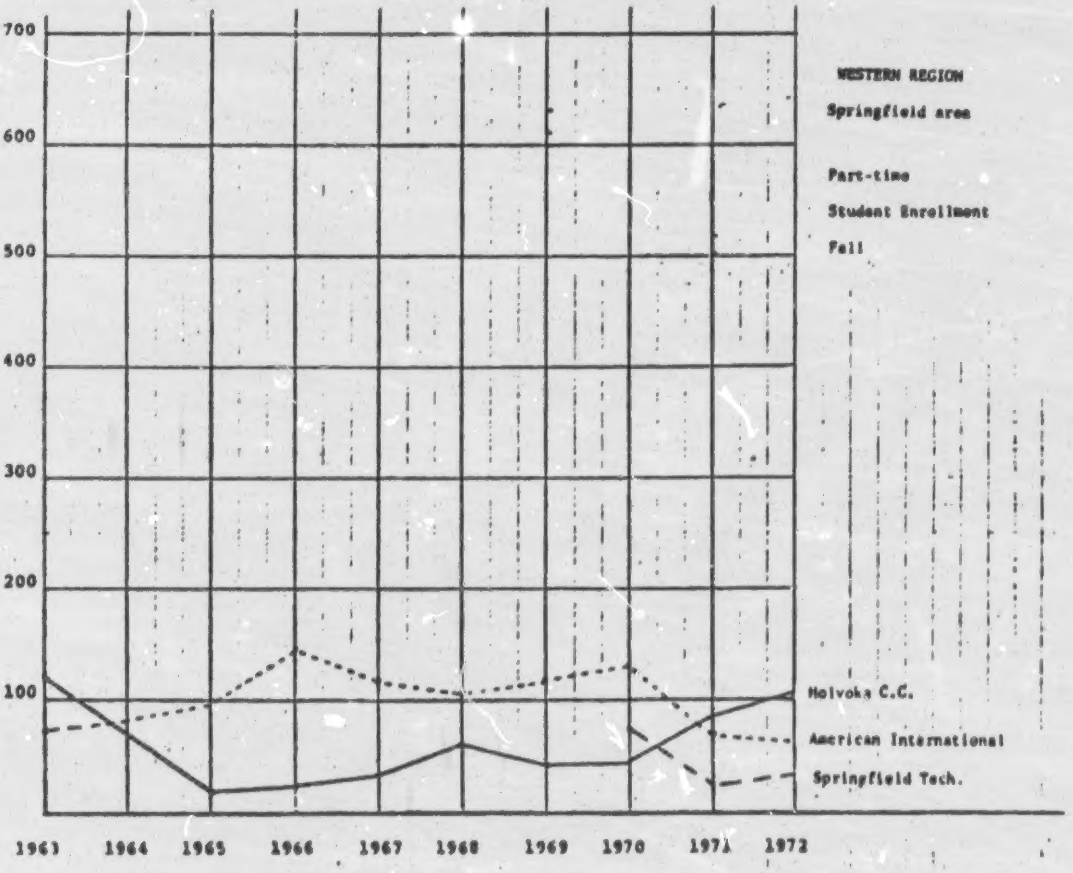
WESTERN REGION

Springfield area

Continuing Education

Student Enrollment

Fall



WESTERN REGION

Springfield area

Part-time

Student Enrollment

Fall

LISTING OF EVENTS USEFUL IN INTERPRETING AREA TREND CHARTS

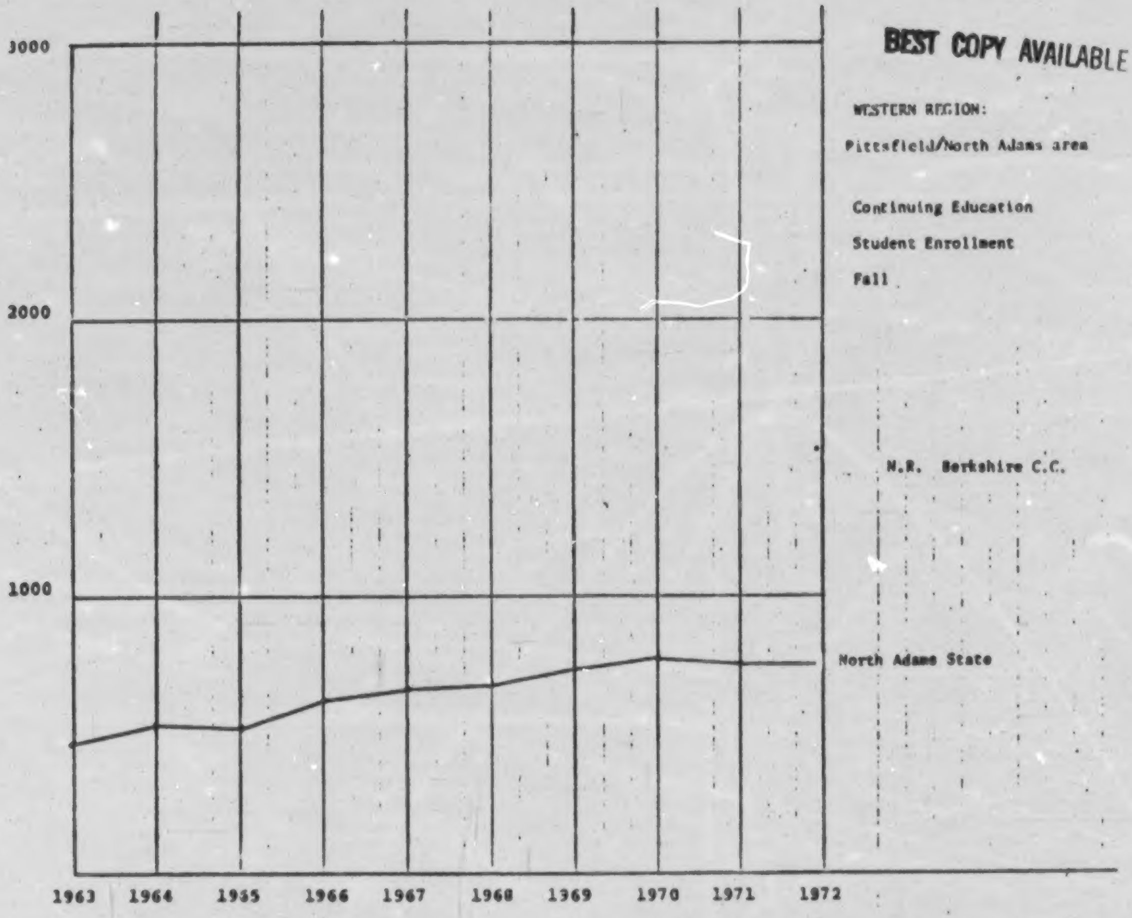
PITTSFIELD/NORTH ADAMS AREA

Year	School	Program	Type
1971	North Adams State	Management	BS
1972	Holyoke C.C.	Berkshire County Corrections	AS/STC

---

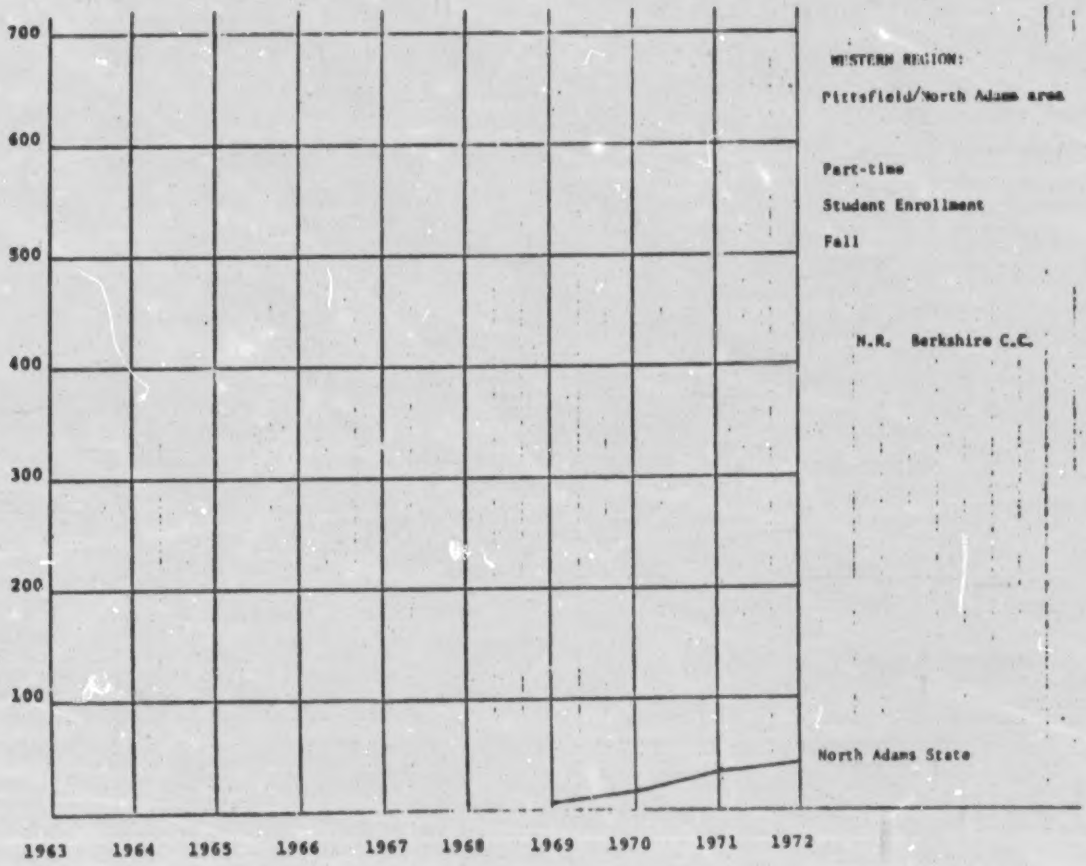
[2] Berkshire Community College did not report a trend history of enrollments.

BEST COPY AVAILABLE



WESTERN REGION:
Pittsfield/North Adams area

Continuing Education
Student Enrollment
Fall



WESTERN REGION:
Pittsfield/North Adams area

Part-time
Student Enrollment
Fall

LISTING OF EVENTS USEFUL IN INTERPRETING AREA TREND CHARTS

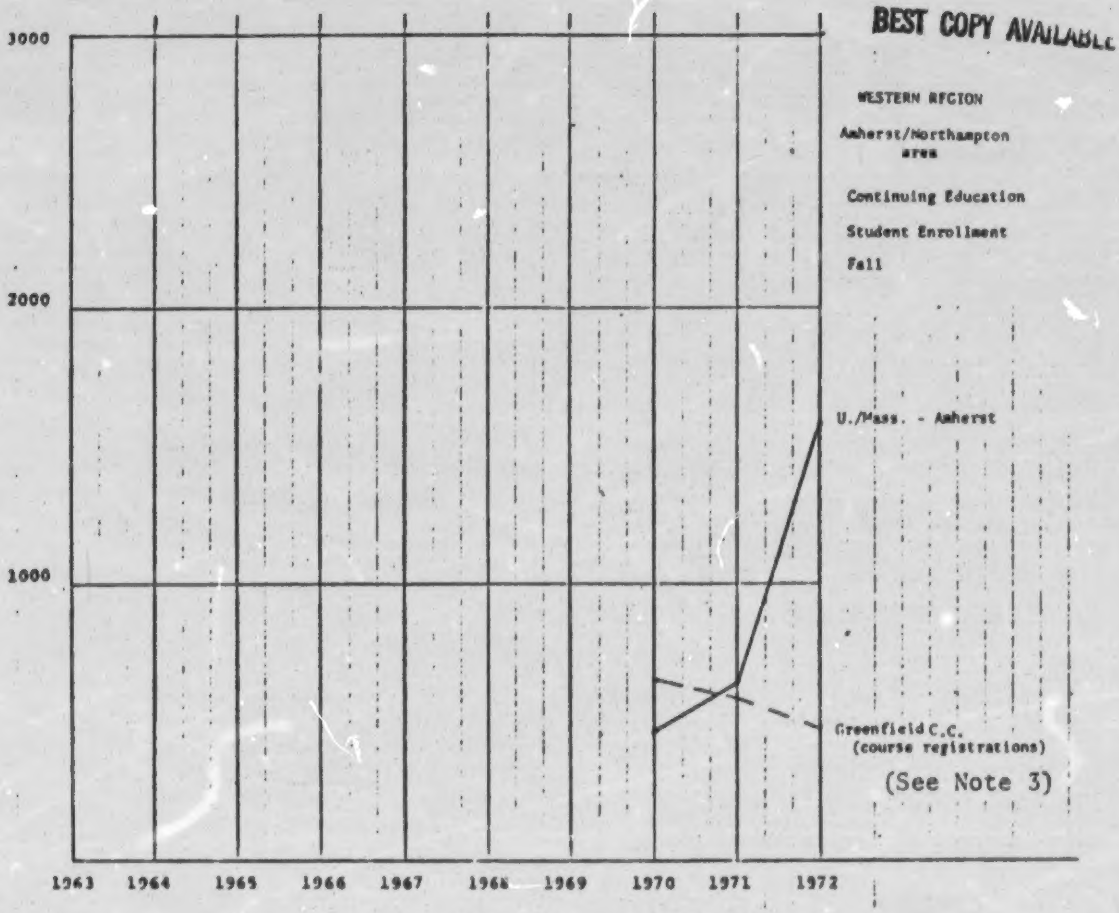
AMHERST/NORTHAMPTON AREA

Year	School	Program	Type
1971	U./Mass., Amherst	COP-Education	BA
1971	U./Mass., Amherst	Education	MA
1972	U./Mass., Amherst	Malcolm X-Education	--
1972	U./Mass., Amherst	Concord-Carlisle Education	BA,MA/BC
1972	U./Mass., Amherst	Fire Science/ Law Enforcement	BGS
1972	Westfield State	Greenfield	STC
1972	Westfield State	Turner's Falls	STC

---

[3] The enrollment trend chart for Greenfield Community College (Continuing Education) does not include community service programs, which had registrations of 730 in fall 1972.

BEST COPY AVAILABLE



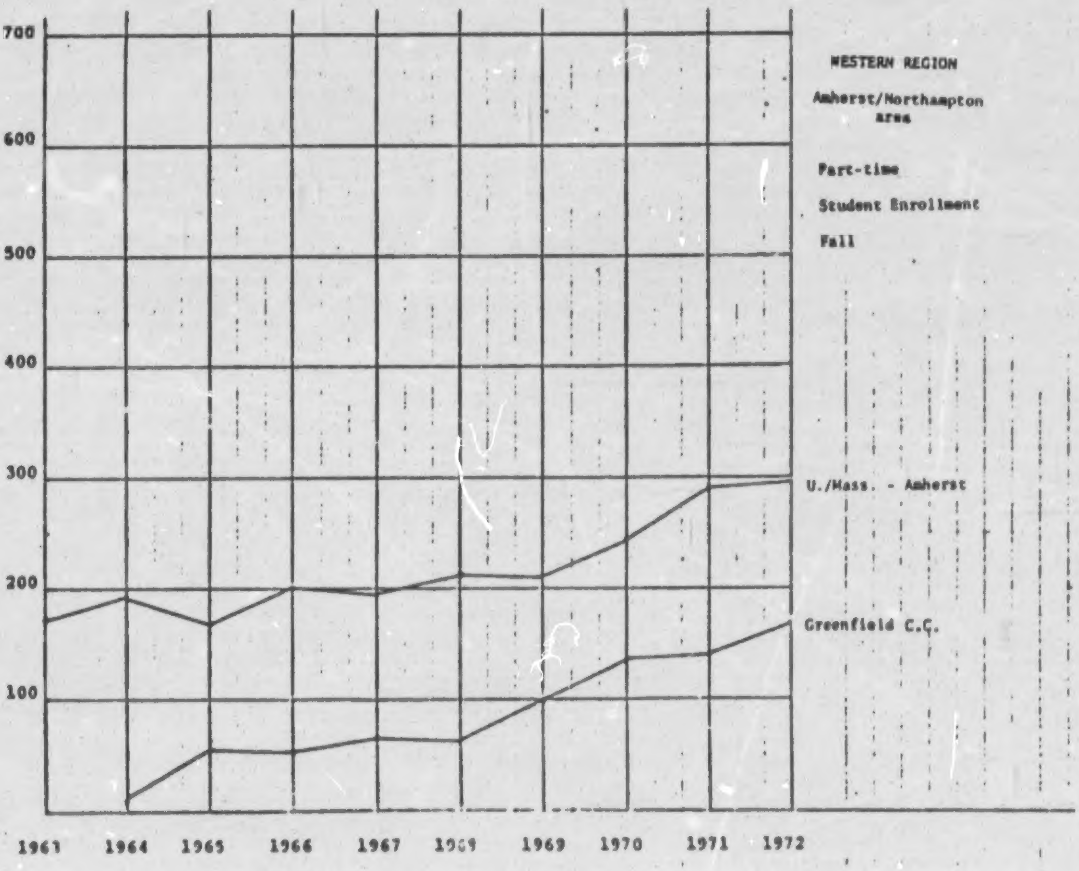
WESTERN REGION

Amherst/Northampton area

Continuing Education

Student Enrollment

Fall



WESTERN REGION

Amherst/Northampton area

Part-time

Student Enrollment

Fall

LISTING OF EVENTS USEFUL IN INTERPRETING AREA TREND CHARTS

WORCESTER AREA

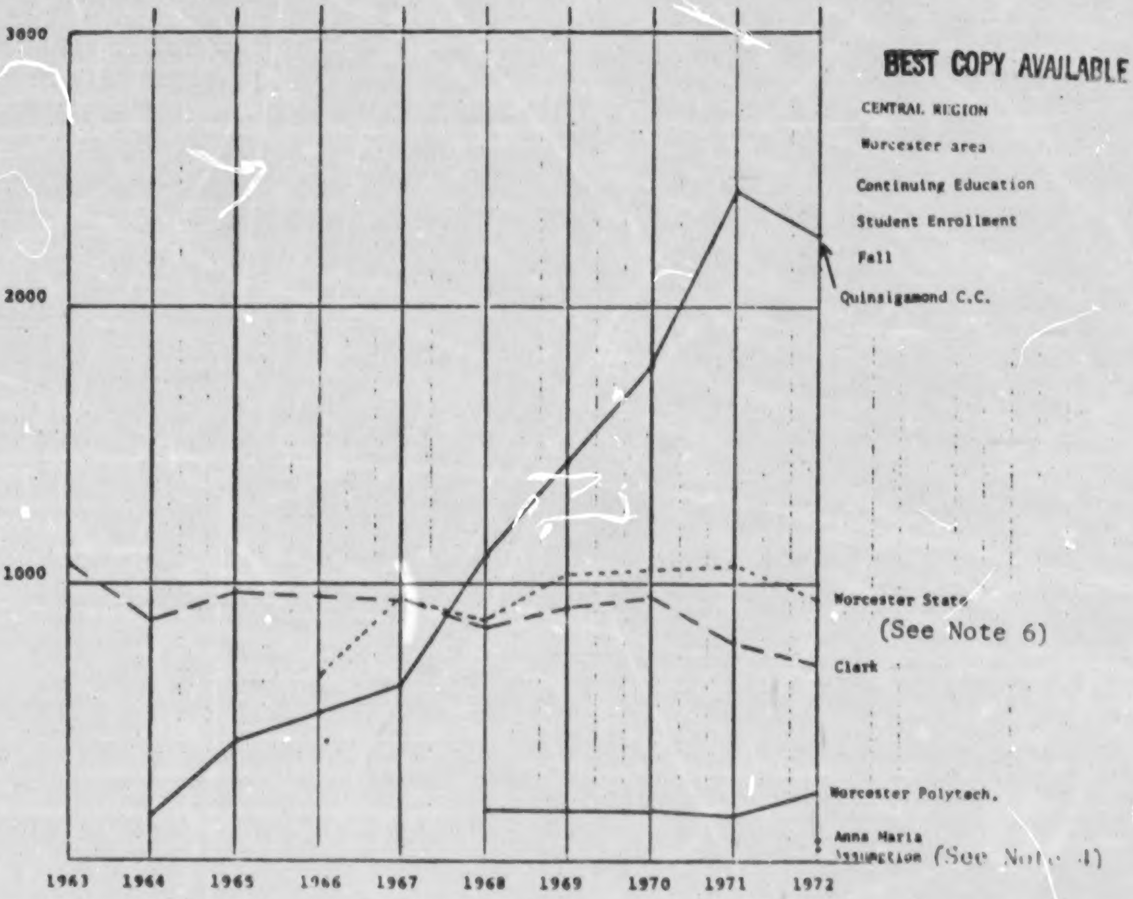
Year	School	Program	Type
1966	Clark University	Worcester Art Museum	BFA
1967	Quinsigamond C.C.	Law Enforcement	AA
1968	Quinsigamond C.C.	Fire Science	AA
1968	Quinsigamond C.C.	Early Childhood Assistant	AA
1969	Quinsigamond C.C.	Southbridge	BC
1970	Quinsigamond [illegible]	Environmental Health	AA
1971	Quinsigamond [illegible]	Blackstone	BC
1972	Quinsigamond C.C.	Worcester Police Department	STC
1972	Quinsigamond C.C.	State Mutual Life Insurance Co.	STC

[4] Assumption College (Continuing Education) did not report a trend history of enrollments. Fall 1972 enrollment was 58.

[5] Worcester Polytechnic Institute (part-time) did not report a trend history of enrollments. Fall 1972 enrollment was 30.

[6] The enrollment trend chart for Worcester State College (Continuing Education) does not include special programs, which had a fall 1972 enrollment of 38.

BEST COPY AVAILABLE



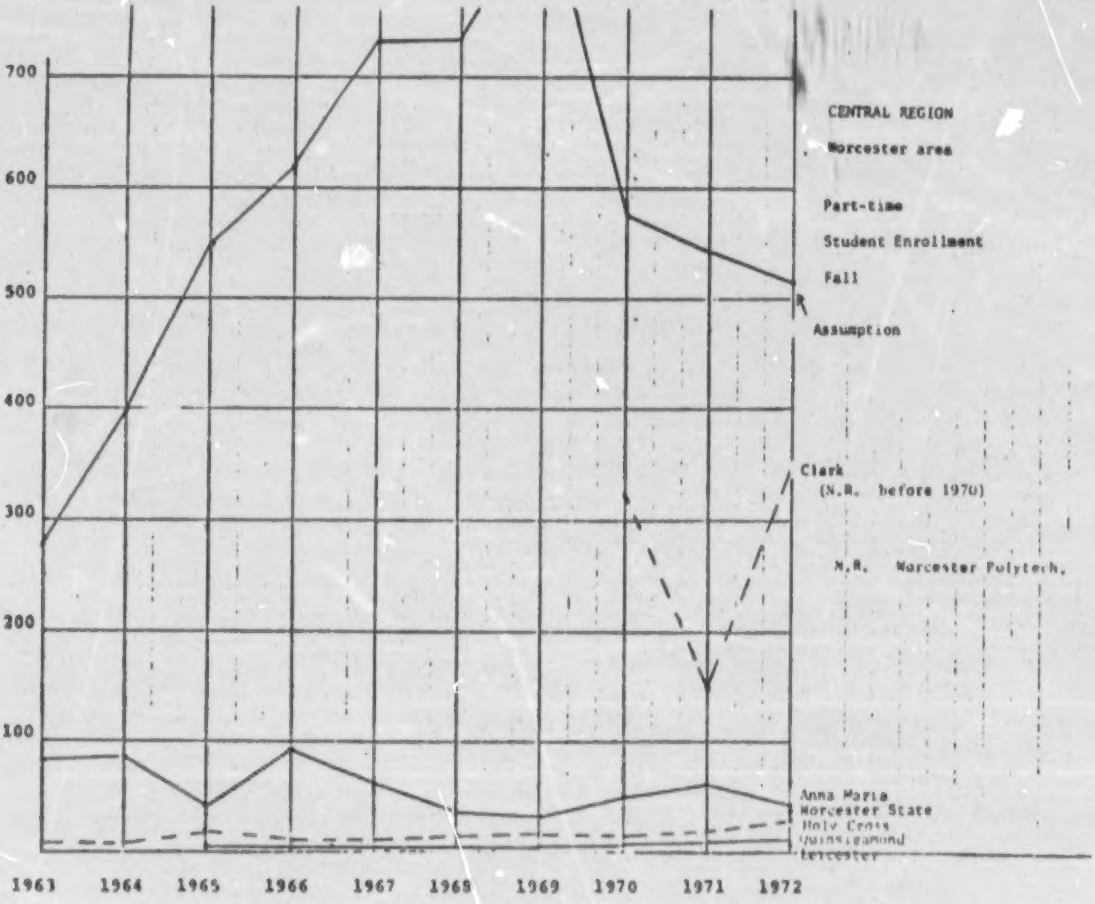
CENTRAL REGION

Worcester area

Continuing Education

Student Enrollment

Fall



CENTRAL REGION

Worcester area

Part-time

Student Enrollment

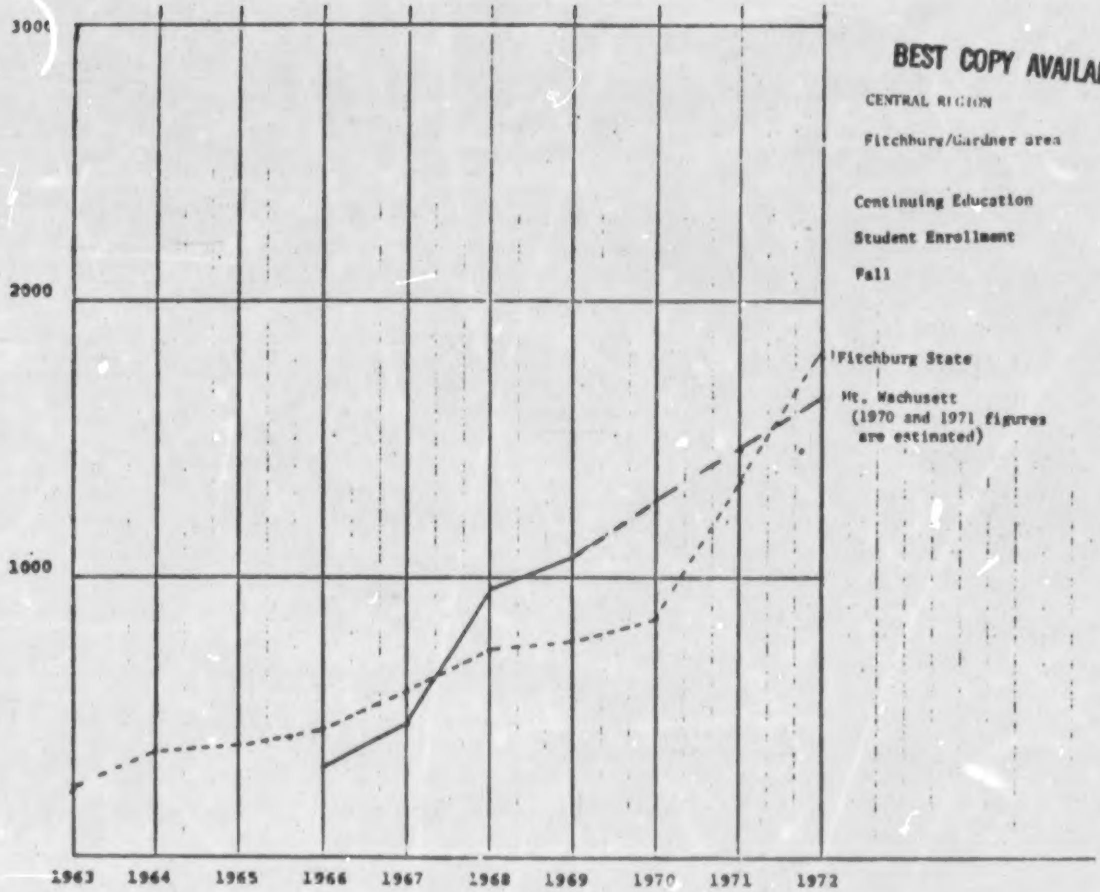
Fall

LISTING OF EVENTS USEFUL IN INTERPRETING AREA TREND CHARTS

FITCHBURG/GARDNER AREA

Year	School	Program	Type
1966	Mt. Wachusett C.C.	Ft. Devens	BC
1968 (spring)	Fitchburg State	Industrial Arts Teachers	cert./ STC
1969	Mt. Wachusett C.C.	Engineering Technology	AS
1969	Mt. Wachusett C.C.	Law Enforcement	AS
1969	Fitchburg State	Industrial Education	MEd
1969	Fitchburg State	Sciences	MEd
1970	Mt. Wachusett C.C.	Community Mental Health	AS
1971	Mt. Wachusett C.C.	Athol H.S.	STC
1971	Fitchburg State	In-service Teachers	STC
1971	Fitchburg State	English	MAT
1972	Mt. Wachusett C.C.	Nashoba Regional High School	STC
1972	Mt. Wachusett C.C.	Fire Science	AS
1972	Fitchburg State	Occupational Education	MEd

BEST COPY AVAILABLE

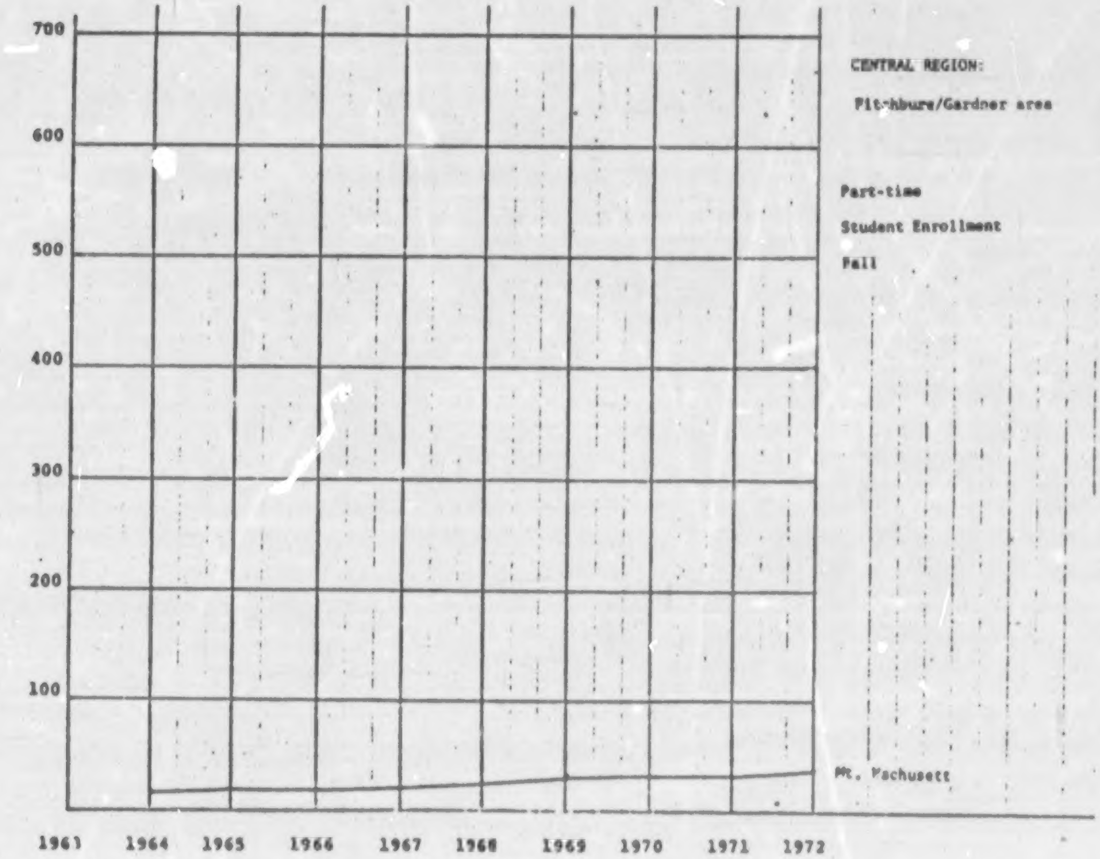

CENTRAL REGION

Fitchburg/Gardner area

Continuing Education

Student Enrollment

Fall


CENTRAL REGION:

Fitchburg/Gardner area

Part-time

Student Enrollment

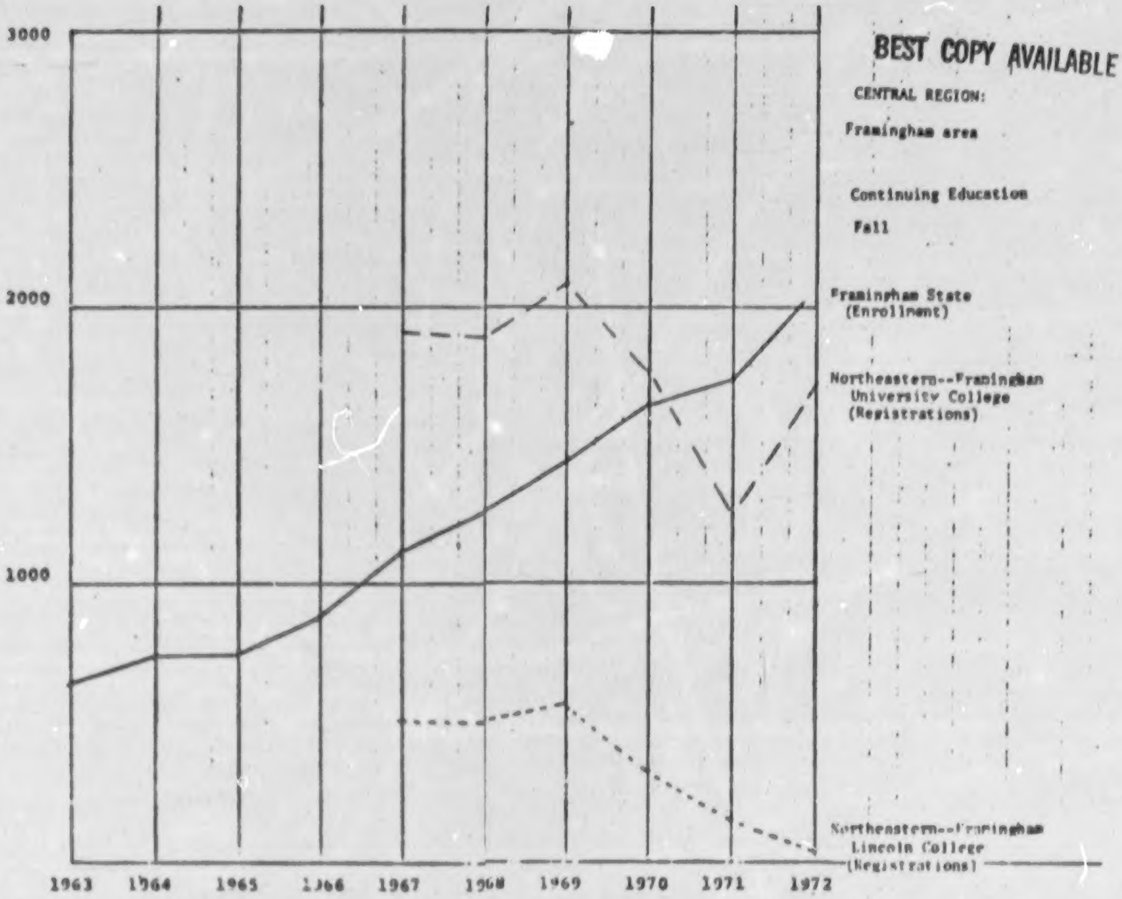
Fall

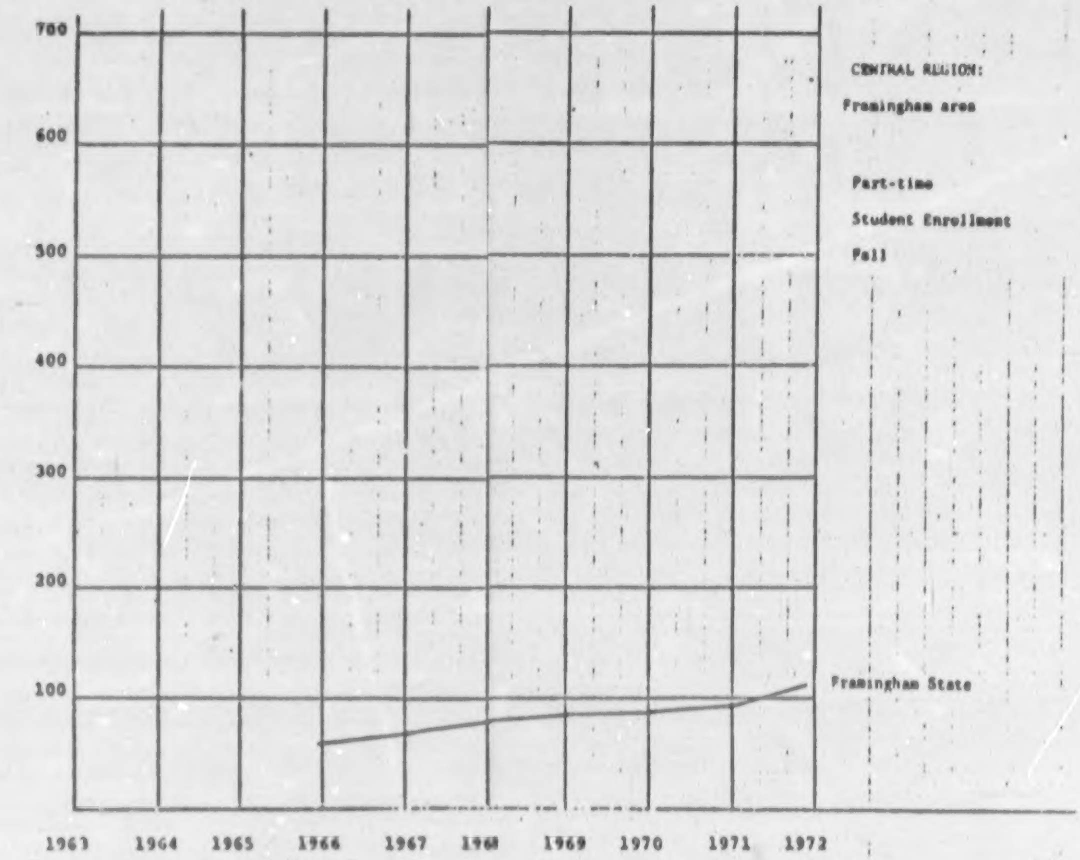
LISTING OF EVENTS USEFUL IN INTERPRETING AREA TREND CHARTS

FRAMINGHAM AREA

Year	School	Program	Type
1965	Northeastern	Framingham	BC
1967	Framingham State	Secondary Education	MEd
1968	Framingham State	Secondary Education	MEd
1968	Framingham State	Elementary Education	MEd
1968	Northeastern	Ashland	BC
1970	Framingham State	Elementary Education	MEd
1970	Framingham State	Secondary Education	MEd
1970	Framingham State	Administration	MEd
1970	Framingham State	Food and Nutrition	MS
1972	Framingham State	Framingham Civic League	BC
1972	Framingham State	Medfield State Hospital	STC
1972	U./Mass., Amherst	Concord-Carlisle H.S.	BC

BEST COPY AVAILABLE





LISTING OF EVENTS USEFUL IN INTERPRETING AREA TREND CHARTS

LYNN/SALEM AREA

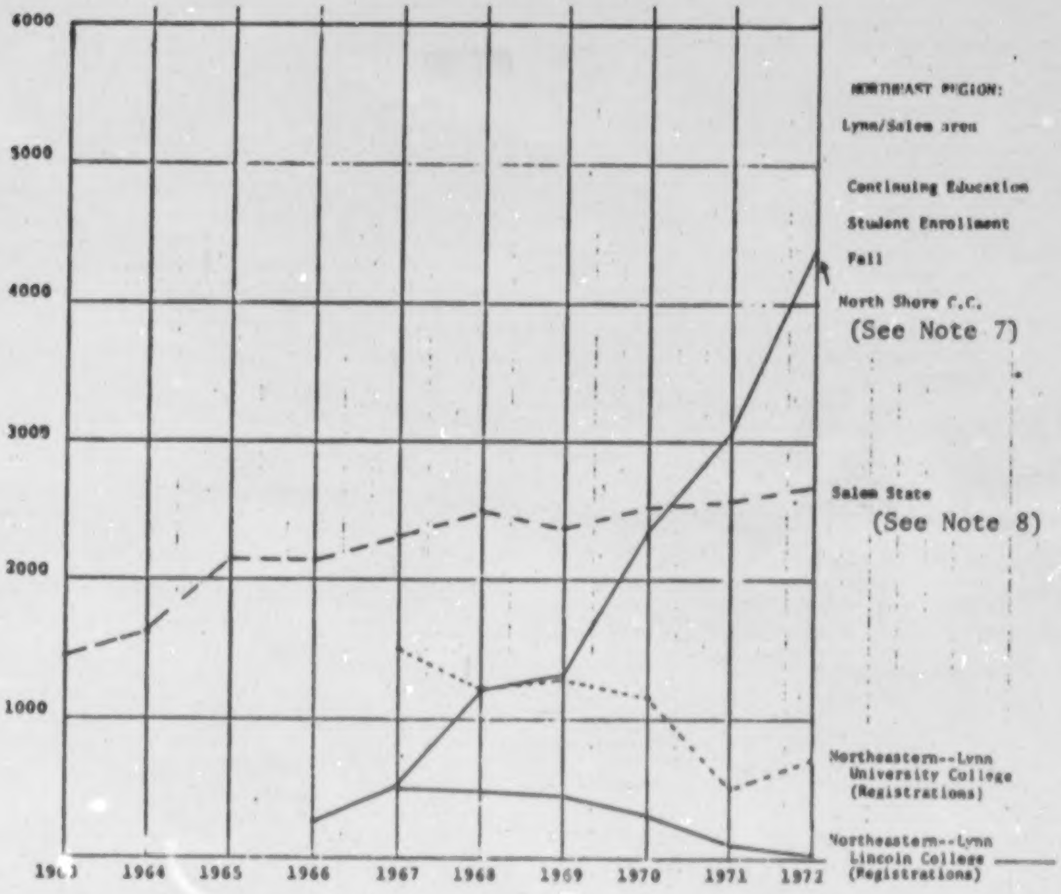
Year	School	Program	Type
1965	Northeastern	Lynn	BC
1966	North Shore C.C.	Management	AA
1967	North Shore C.C.	Electro-Magnetic Technology	AA
1967	Salem State	Chemistry	MAT
1967	Salem State	English	MAT
1967	Salem State	Mathematics	MAT
1967	Salem State	History	MAT
1968	North Shore C.C.	Accounting	AA
1968	North Shore C.C.	Data Processing	AA
1968	North Shore C.C.	Law Enforcement	AA
1968	North Shore C.C.	Fire Science	AA
1968	North Shore C.C.	Aviation Science	AA
1969	North Shore C.C.	Gloucester	BC
1969	North Shore C.C.	Environmental Health	AA
1969	Salem State	English	BA
1969	Salem State	History	BA
1970	Salem State	Early Childhood Education	BS/MEd
1970	Salem State	Business Education	BS
1970	North Shore C.C.	Malden	BC
1970	North Shore C.C.	Retailing	AA
1970	North Shore C.C.	Radiologic Technology	AA
1970	North Shore C.C.	Nursing	AA
1971 (spring)	North Shore C.C.	Danvers	BC
1971	Salem State	Nursing	BS
1971	Salem State	Mathematics	MS
1971	Salem State	History	MA
1972	North Shore C.C.	Lynn	BC

[7] The enrollment trend chart for North Shore Community College (Continuing Education) does not include community service programs, which had a fall 1972 enrollment of 1459.

[8] The enrollment trend chart for Salem State College (Continuing Education) does not include special programs, which had a fall 1972 enrollment of 173.

BEST COPY AVAILABLE

BEST COPY AVAILABLE

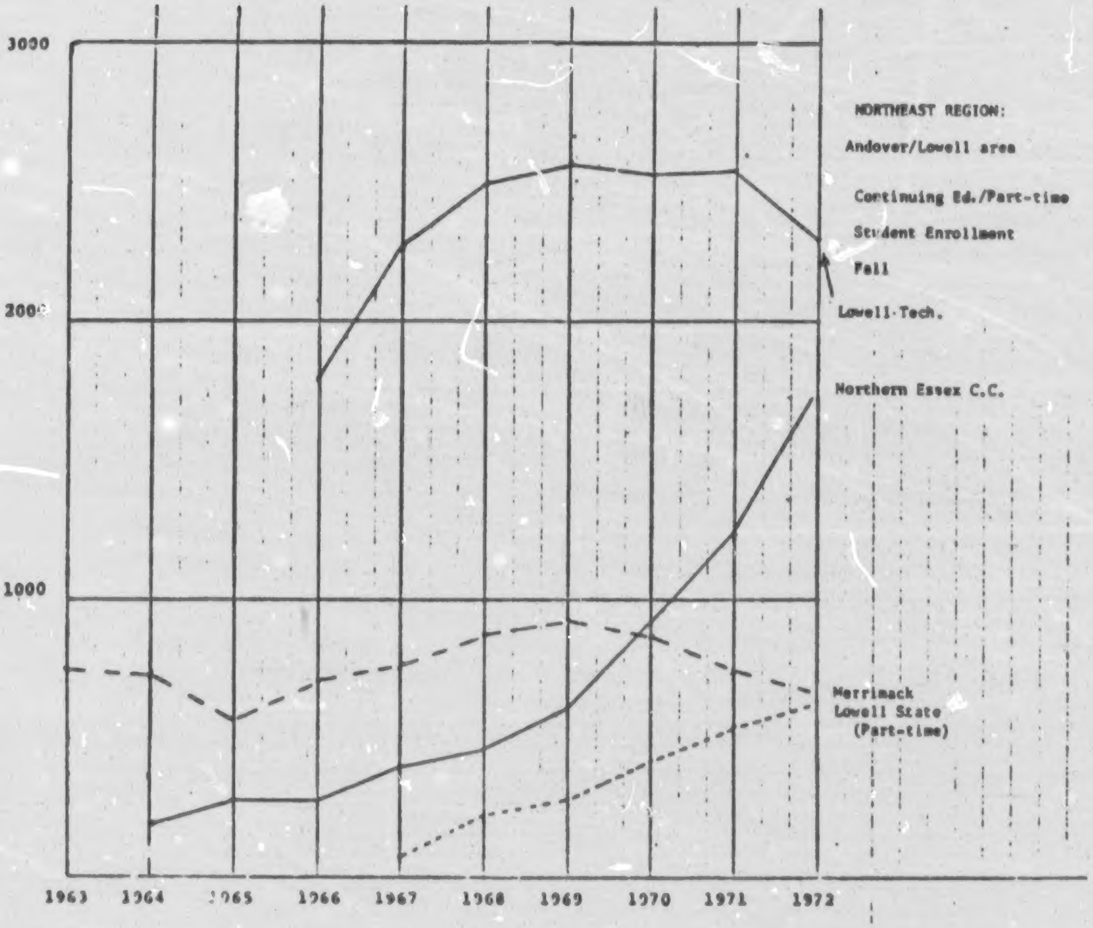


LISTING OF EVENTS USEFUL IN INTERPRETING AREA TREND CHARTS

ANDOVER/LOWELL AREA

Year	School	Program	Type
1964	Lowell Tech.	Business Administration	AS
1964	Lowell Tech.	Radiological Technology	AS
1965	Lowell Tech.	Mathematics	AT
1965	Northeastern	Haverhill	BC
1966	Lowell Tech.	Sci. Data Processing	AT
1967	Lowell Tech.	Civil Engineering	BSET
1968	Northern Essex C.C.	Nursing	AA
1969	Lowell Tech.	Western Electric Employer Training	STC
1969	Lowell Tech.	Law Enforcement	AT
1969	Lowell Tech.	Business Administration	BBA
1969	Lowell Tech.	Chemical Engineering	BST
1969	Lowell Tech.	Electronic Engineering	BSET
1969	Lowell Tech.	Industrial Engineering	BSET
1969	Lowell Tech.	Mechanical Engineering	BSET
1972	Lowell Tech.	Sci. Data Processing	BT
1972	Lowell Tech.	Mathematics	BT

BEST COPY AVAILABLE



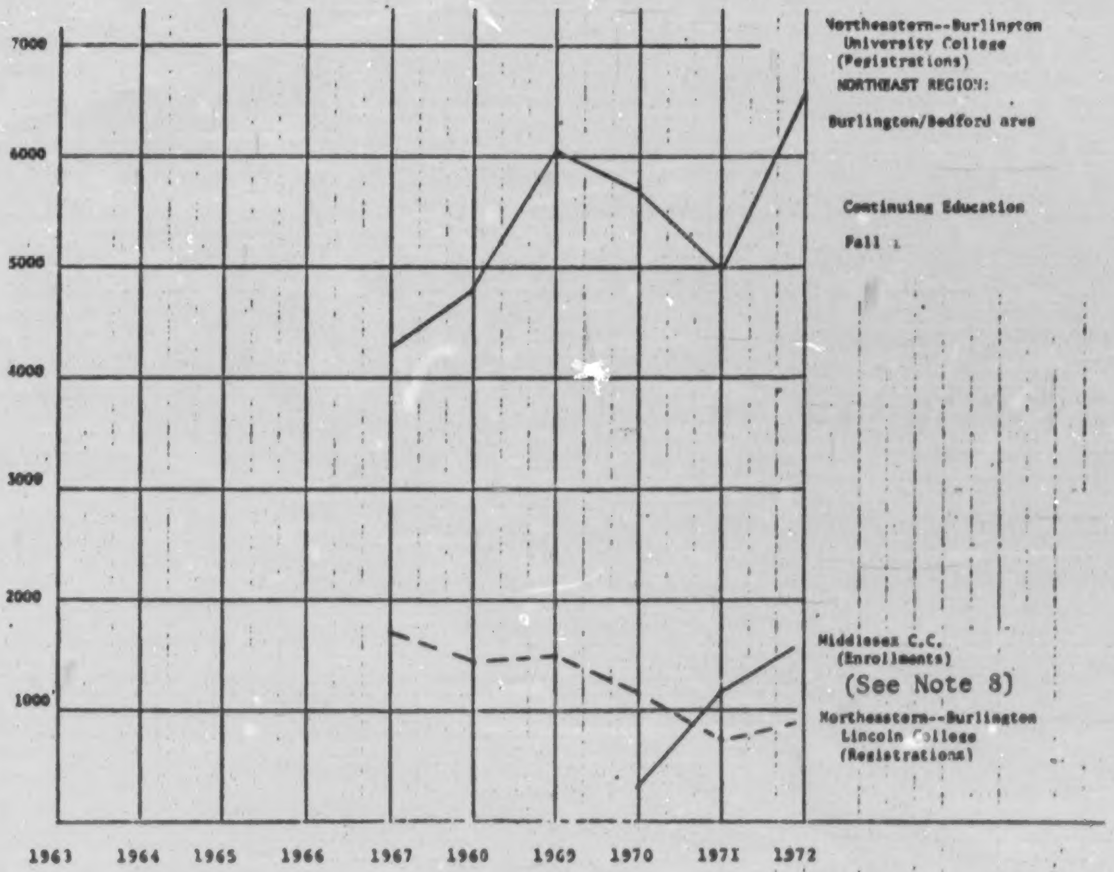
LISTING OF EVENTS USEFUL IN INTERPRETING AREA TREND CHARTS

BURLINGTON/BEDFORD AREA

Year	School	Program	Type
1964	Northeastern	Burlington	BC
1970	Middlesex C.C.	Liberal Arts	AA
1970	Middlesex C.C.	Arts and Sciences	AA
1970	Middlesex C.C.	Management	AA
1970	Middlesex C.C.	Secretarial	AA
1970	Middlesex C.C.	Lowell	STC
1971	Middlesex C.C.	Arlington Extension Center	BC
1971 (Feb.)	Middlesex C.C.	Woburn Extension Center	BC
1971 (Feb.)	Middlesex C.C.	Hanscom Extension Center	BC
1971	Middlesex C.C.	Lexington Extension Center	BC
1971	Middlesex C.C.	ABCD Extension Center	BC
1971	Middlesex C.C.	Lexington	STC
1972	Middlesex C.C.	Bedford-Marist Extension Center for Women	BC
1972	Middlesex C.C.	Cambridge	STC

[a] The enrollment trend chart for Middlesex Community College (Continuing Education) does not include special programs, which had a fall 1972 enrollment of 685.

BEST COPY AVAILABLE



LISTING OF EVENTS USEFUL IN INTERPRETING AREA TREND CHARTS

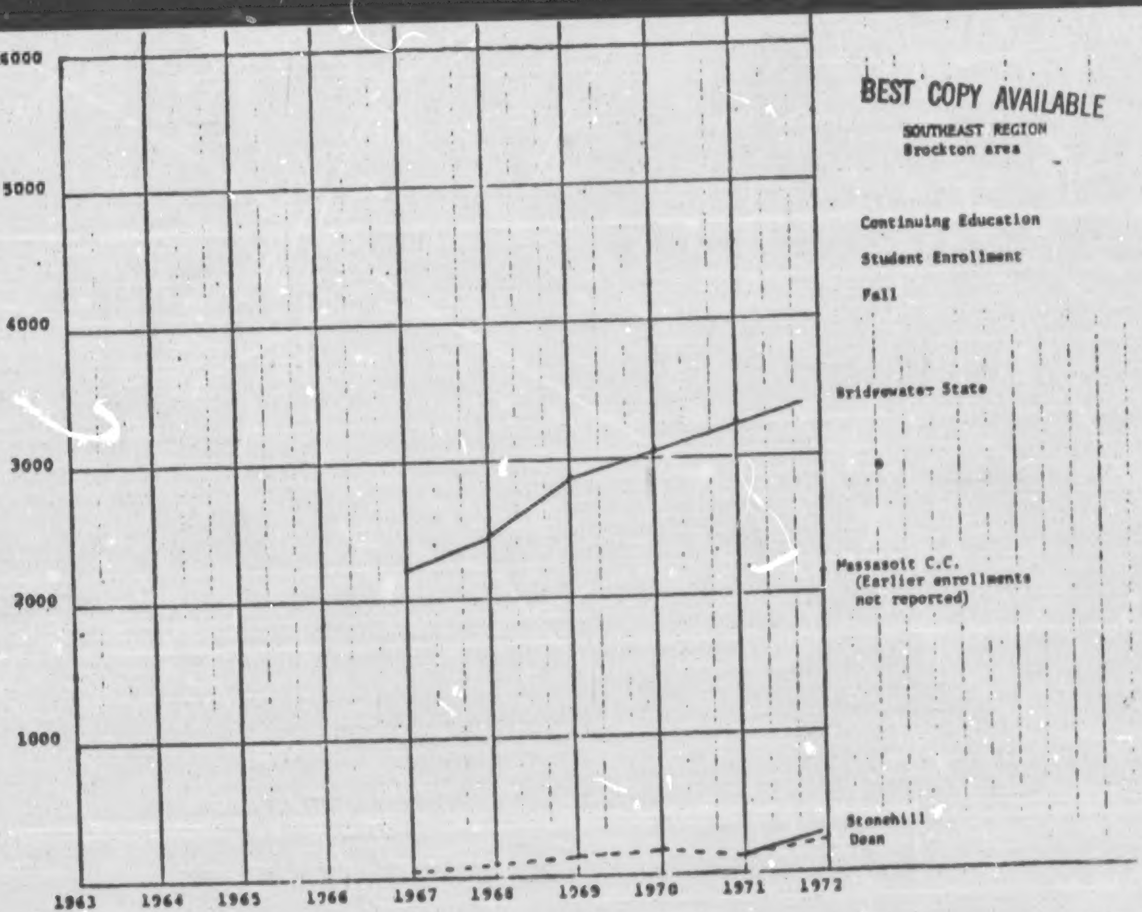
BROCKTON AREA

Year	School	Program	Type
1963	Bridgewater	Elementary Education	MEd
1965	Bridgewater	Guidance	MEd
1965	Bridgewater	Special Education	MEd
1965	Bridgewater	Foreign Languages	MEd
1965	Bridgewater	History	MEd
1965	Bridgewater	Mathematics	MEd
1965	Bridgewater	Earth Sciences	MEd
1965	Bridgewater	Physical Sciences	MEd
1965	Bridgewater	English	MEd
1965	Bridgewater	Social Science	MEd
1965	Northeastern	Norwood	BC
1965	Northeastern	Weymouth	BC
1966	Bridgewater	Reading Education	MEd
1966	Bridgewater	Administration	MEd
1966	Bridgewater	Physics	MEd
1966	Bridgewater	Chemistry	MEd
1967	Bridgewater	Library	MEd
1968	Bridgewater	Humanities	MEd
1969	Bridgewater	Biology	MA
1969	Bridgewater	Elementary School Math.	MEd
1969	Bridgewater	Health Education	MEd
1969	Bridgewater	Instructional Media Educ.	MEd
1969	Bridgewater	History	MA
1969	Bridgewater	Geography	MEd
1969	Dean J.C.	Law Enforcement	AS
1970	Bridgewater	Learning Disabilities	MEd
1970	Bridgewater	Chemistry	MA
1970	Bridgewater	Speech	MEd
1970	Bridgewater	Behavioral Sciences	MEd
1970	Bridgewater	Creative Arts	MEd
1970	Dean J.C.	Interdisciplinary Humanities/Social Studies	AA
1970	Massasoit C.C.	full courses with Bridgewater	BC
1971	Bridgewater	English	MA
1972	Bridgewater	Physical Education	MEd
1972	Bridgewater	Humanities	MA
1972	Dean J.C.	Corrections	AS
1972	Massasoit C.C.	Correctional rehabilitational education assistance, Plymouth, Bridgewater, Mass. Correctional Institute	STC
1972	Massasoit C.C.	Education assistance to elderly-Brockton	BC

---

[9] Massasoit Community College (Continuing Education) did not report a trend history of enrollments. Fall 1972 enrollment was 2143.

BEST COPY AVAILABLE

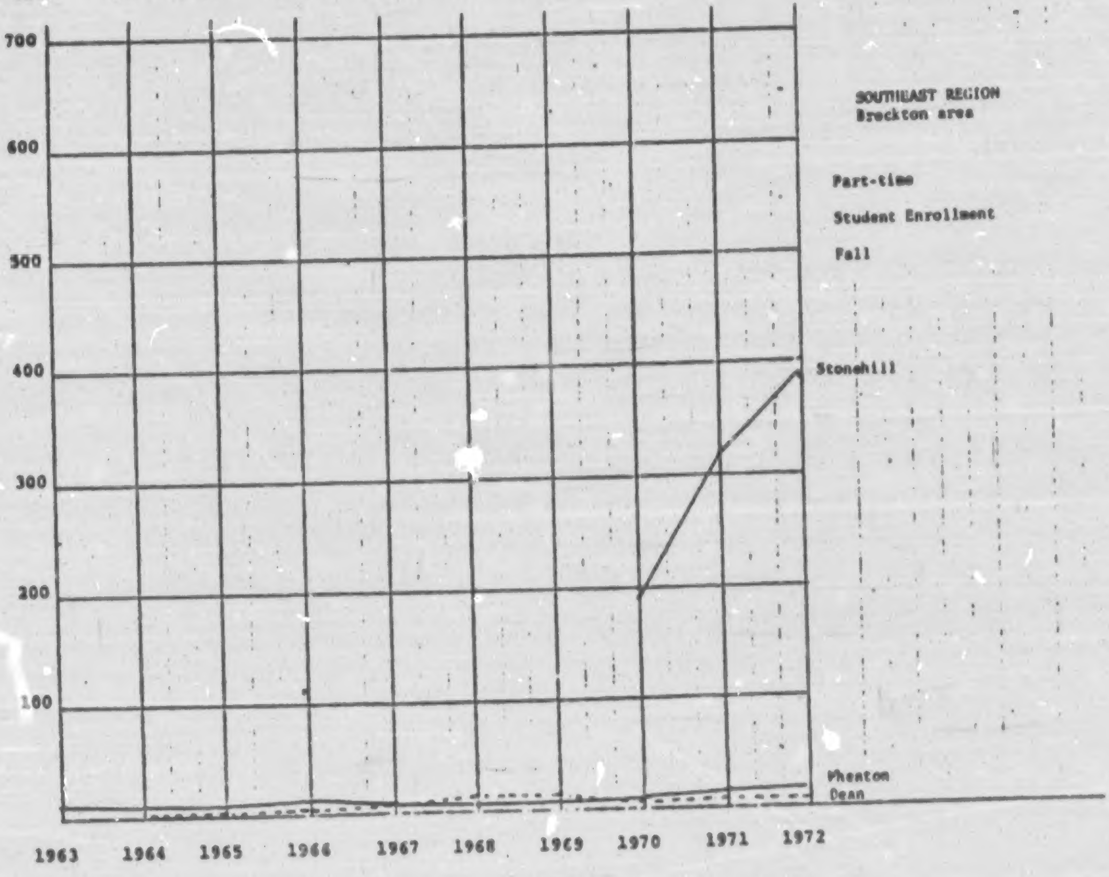


SOUTHEAST REGION
Brockton area

Continuing Education

Student Enrollment

Fall



SOUTHEAST REGION
Brockton area

Part-time

Student Enrollment

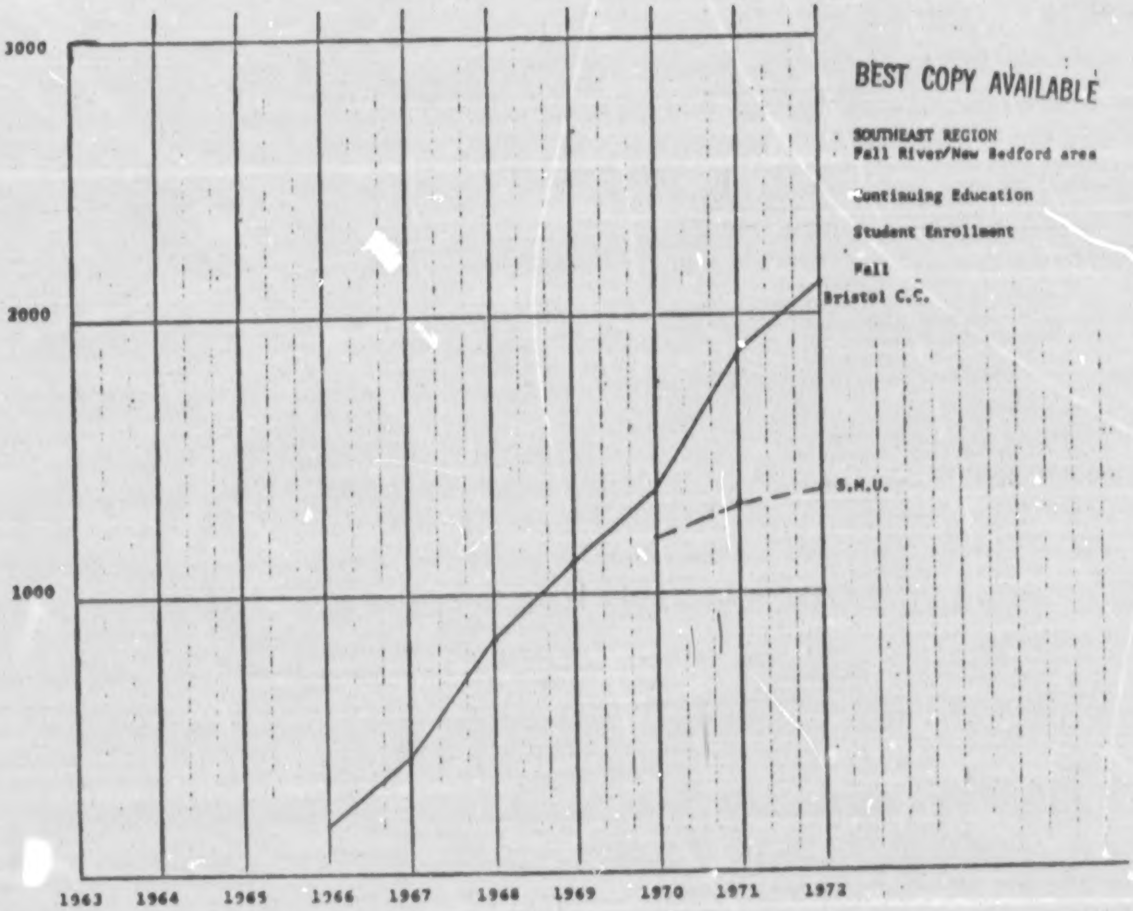
Fall

LISTING OF EVENTS USEFUL IN INTERPRETING AREA TREND CHARTS

FALL RIVER/NEW BEDFORD AREA

Year	School	Program	Type
1966	Bristol C.C.	Business Administration	AS
1966	Bristol C.C.	Elementary Education	AA
1966	Bristol C.C.	Engineering	AS
1966	Bristol C.C.	Library Science	AS
1966	Bristol C.C.	Law Enforcement	AS
1966	Bristol C.C.	Fire Science	AS
1968	Bristol C.C.	Attleboro H.S. credit courses	STC
1970	Bristol C.C.	New Bedford H.S. credit courses	STC
1971	Bristol C.C.	King Philip Regional H.S. credit courses	STC
1971	Bristol C.C.	Norfolk State Prison with STEP credit courses	STC
1972	Bristol C.C.	Taunton Regional Vocational H.S. credit courses	STC

BEST COPY AVAILABLE

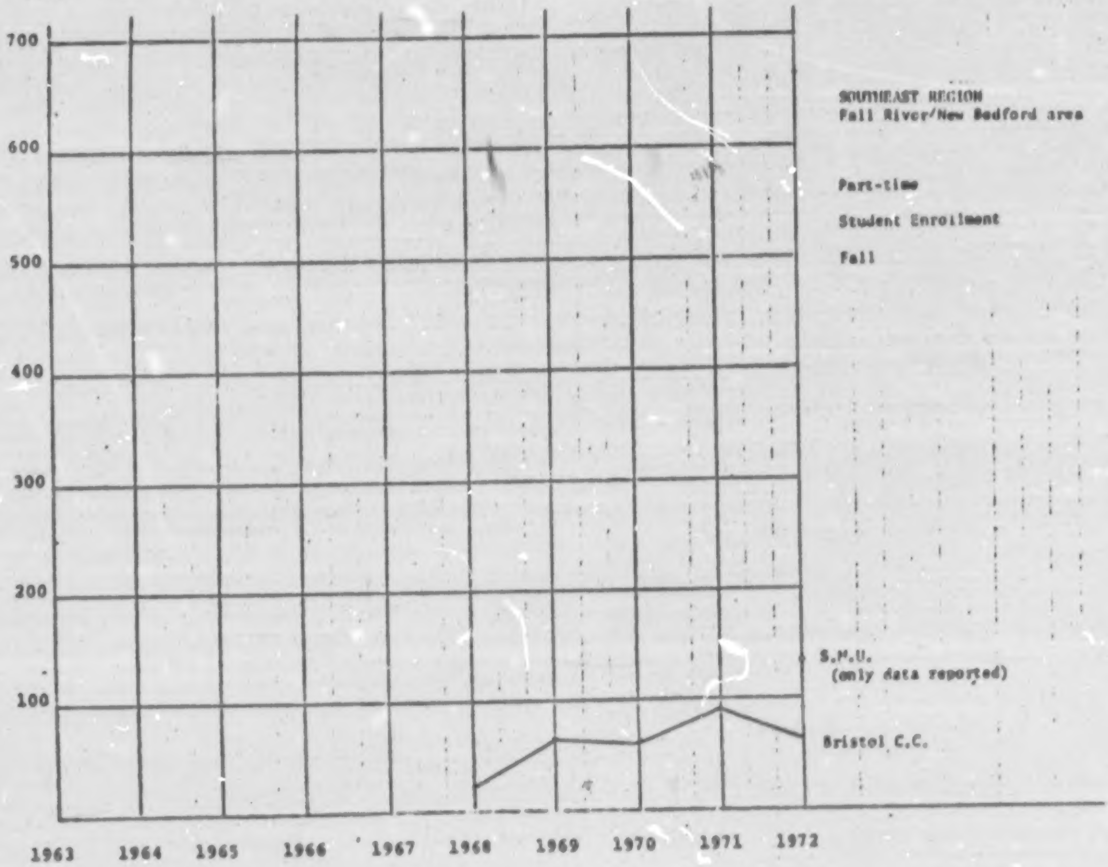


SOUTHEAST REGION
Fall River/New Bedford area

Continuing Education

Student Enrollment

Fall



SOUTHEAST REGION
Fall River/New Bedford area

Part-time

Student Enrollment

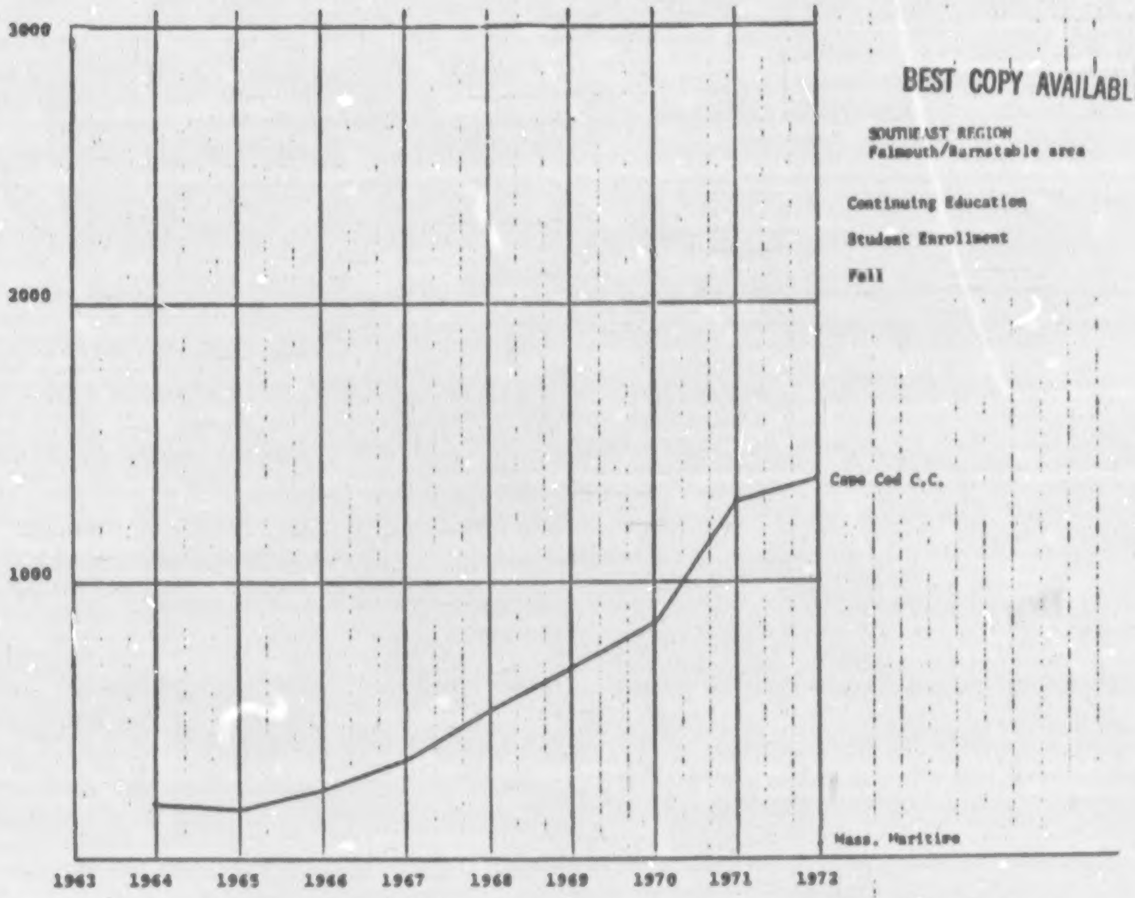
Fall

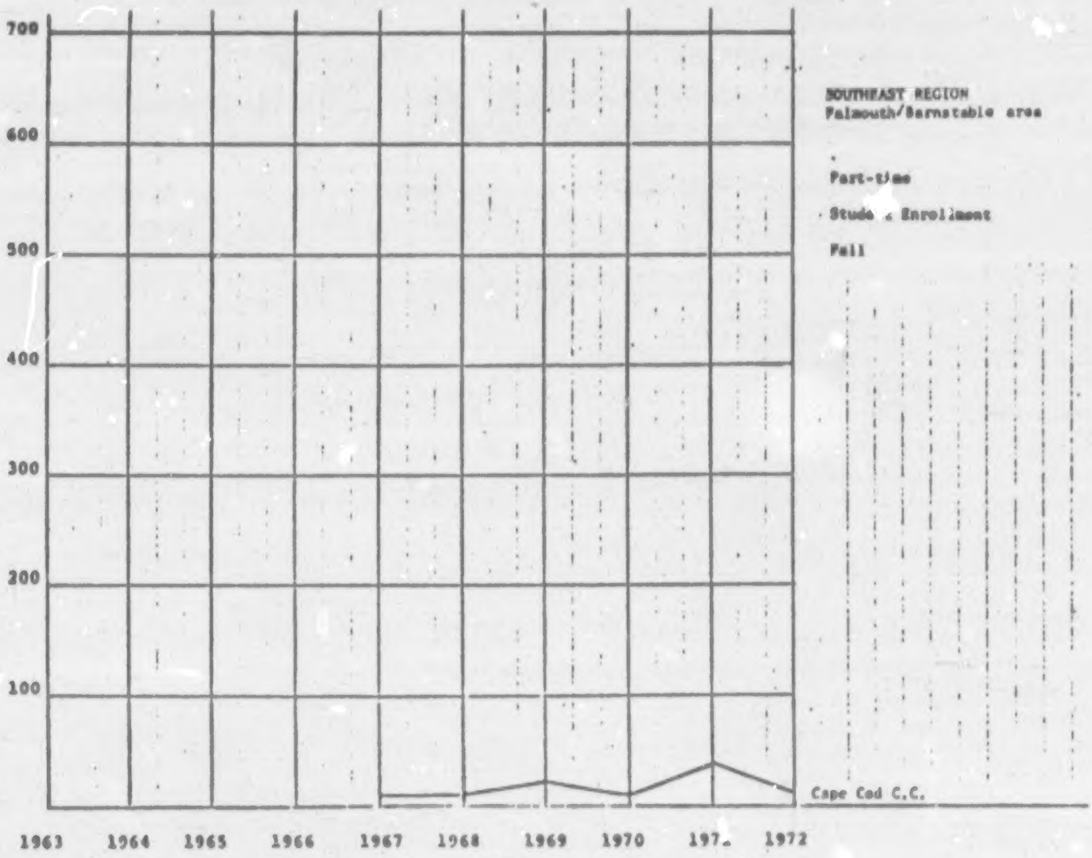
LISTING OF EVENTS USEFUL IN INTERPRETING AREA TREND CHARTS

FALMOUTH/BARNSTABLE AREA

Year	School	Program	Type
1963	Northeastern	Bourne	BC
1969	Cape Cod C.C.	Liberal Arts	AA
1972	Cape Cod C.C.	Law Enforcement	AA
1972	Mass. Maritime	Program started -- Growth planned	

BEST COPY AVAILABLE





LISTING OF EVENTS USEFUL IN INTERPRETING AREA TREND CHARTS

BOSTON AREA

Year	School	Program	Type
1963	Mass. Bay C.C.	Business	AS
1963	Mass. Bay C.C.	Liberal Arts	AS
1963	Northeastern	Law Enforcement Bourne	STC
1963	Northeastern	Law Enforcement Ayer	STC
1964	Mass. College of Art	Arts (Education)	MS
1964	Northeastern	Weston	BC
1964	Northeastern	Law Enforcement Harvard	BC
1965	Northeastern	Dental Hygiene	AS
1965	Northeastern	Radiologic Technology	AS
1965	Northeastern	Therapeutic Recreation	AS
1965	Northeastern	Art History	BS
1965	Northeastern	Medical Technology	BS
1965	Northeastern	Dental Hygiene	BS
1965	Northeastern	Medical Records Technology	BS
1965	Northeastern	Cytotechnology	BS
1965	Northeastern	Health Agency Management	BS
1966	Boston State	Administration	MEd
1966	Boston University	English	BLS
1967	Boston University	Mathematics	BLS
1967	Northeastern	Law Enforcement Bridgewater	STC
1968	Northeastern	Environmental Engineering	AE
1968	Mass. Bay C.C.	Fire Science	AS
1968	Boston University	Computer Sciences	BAS
1968	Suffolk University	Social Work	BA
1968	Boston State	Early Childhood	MEd
1968	Harvard U.	Roxbury Program	BC

BOSTON AREA (cont'd.)

Year	School	Program	Type
1969	Mass. Bay C.C.	Business (federal option)	AS
1969	Mass. Bay C.C.	Early Childhood Assistant	AS
1969	Mass. Bay C.C.	Law Enforcement	AS
1969	Boston College	Area Studies	BA
1969	Boston College	Biological Sciences	BA
1969	Suffolk University	Child Care	BA
1969	Boston College	Mathematics	BA
1969	Boston College	Psychology	BA
1969	Suffolk University	Crime & Delinquency	BA
1969	Boston State	Reading (Elementary)	MEd
1969	Boston State	Reading (Secondary)	MEd
1969	Boston State	Foreign Languages	MEd
1969	Boston State	Speech	MEd
1969	Boston State	Special Education	MEd
1970	Suffolk University	Finance	BA
1970	Suffolk University	Business Administration	BA
1970	Tufts University	Interdisciplinary Studies	BA
1970	Boston State	Latin American Studies	MEd
1970	Boston State	Bilingual Studies	MEd
1970	Boston State	Community Service	MEd
1970	Boston State	Instructional Media	MEd
1970	Boston State	Secondary Education	MEd
1970	Boston State	Natural Sciences	MEd
1970	Boston State	Earth Sciences	MEd
1970	Boston State	Psychology	MEd
1970	Boston State	Political Science	MEd
1970	Boston State	Urban Studies	MEd
1970	Boston State	Public Management	MEd
1970	U./Mass., Boston	training programs-- institutes various field sites	MEd

BOSTON AREA (cont'd.)

Year	School	Program	Type
1970	Mass. Bay C.C.	Law Enforcement various sites	STC
1970	Mass. Bay C.C.	Business Administration	STC
1971	Boston University	Biological Sciences	BLS
1971	Boston University	Fine Arts	BLS
1971	Bentley College	Letters	BS
1971	Boston University	Philosophy	BLS
1971	Northeastern	Law Enforcement Marshfield	STC
1972	Boston College	Law Enforcement	BA
1972	Lesley College	Elementary Education	MEd
1972	Boston State	Blue Hills undergraduate education courses	STC
1972	Boston State	Arlington graduate education courses with Middlesex	STC

[10] The following institutions did not report a trend history of enrollments. Their fall 1972 enrollment is listed below:

Mass. Bay Community College (Continuing Education) - 2131
Simmons College (part-time) - 645
(Continuing Education) - 114
Lesley College (Continuing Education) - 391 (undergraduate)
- 98 (graduate)
Boston College (part-time) - 627 (graduate)
- 231 (School of Management)
Brandeis University (part-time) - 131
Emmanuel College (part-time) - 9

[11] Wellesley College (Continuing Education) reported enrollment trend data which was inconsistent with other information in their Format. Their fall 1972 enrollment was 52 undergraduate students and 9 graduate students.

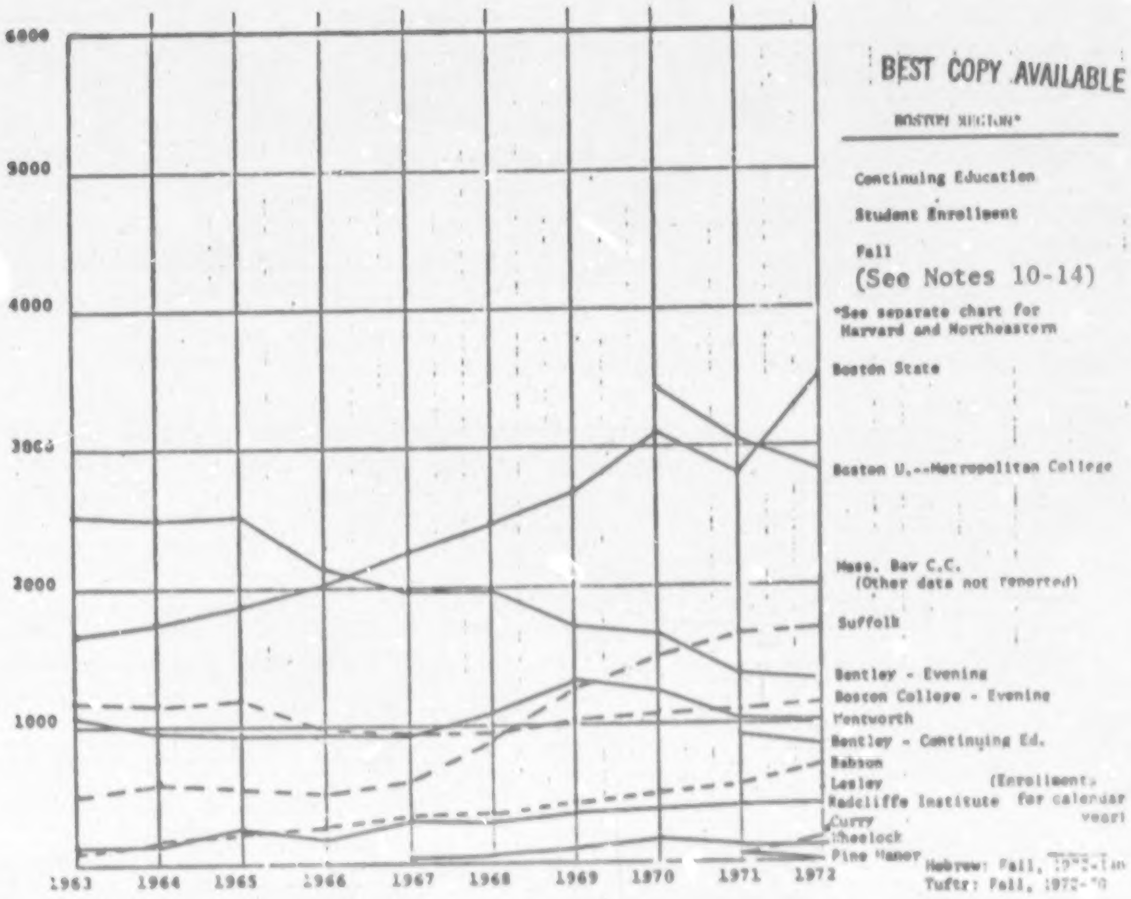
[12] Hebrew College (Continuing Education) reported estimated averages for enrollment trends. The exact fall 1972 enrollment was 140.

[13] The enrollment trend charts for the following schools did not include special programs, fall 1972 enrollment of which is given below:

Northeastern University - Insurance Institute - 455
Boston State College - (Continuing Education) - 727
Bentley College (Evening College) - 200
(Continuing Education) - 838

[14] Two trend charts are given for Boston University Metropolitan College. One excludes enrollments of students cross-registered from other segments of the University.

BEST COPY AVAILABLE



BOSTON REGION*

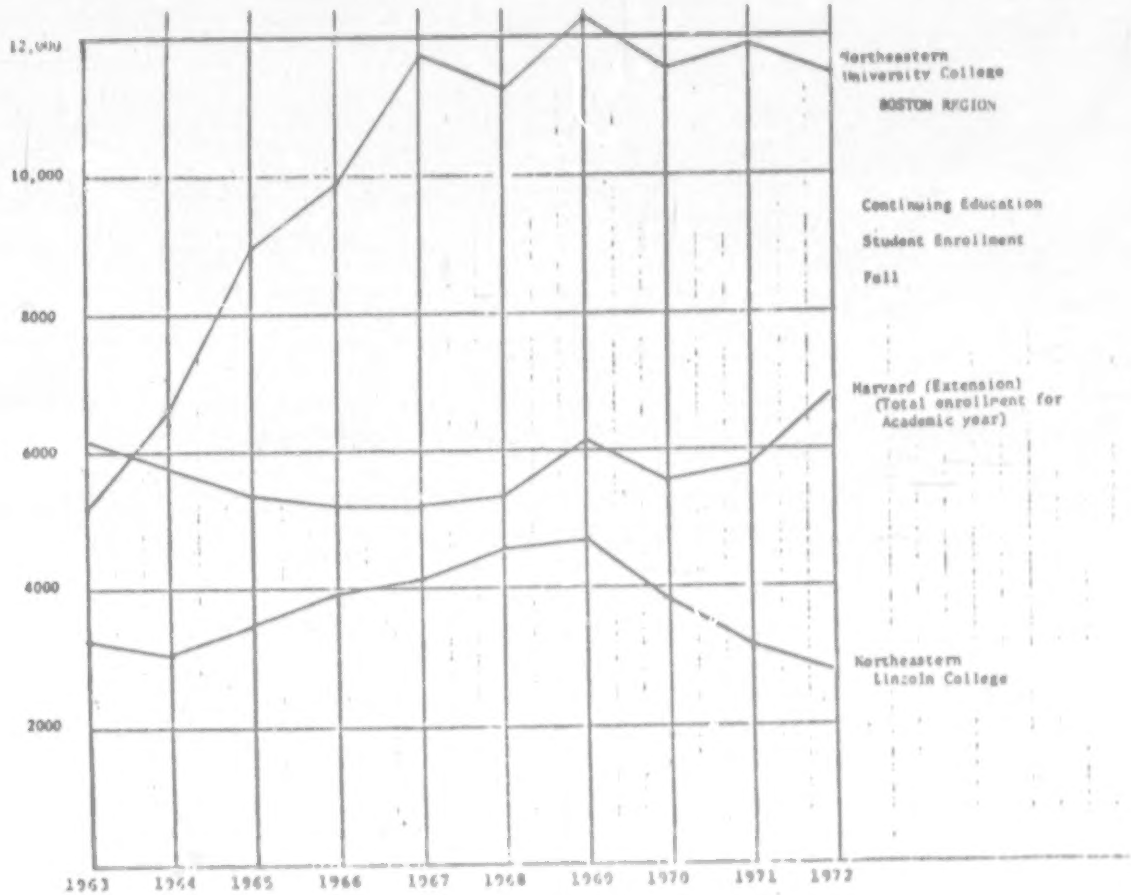
Continuing Education

Student Enrollment

Fall

(See Notes 10-14)

*See separate chart for Harvard and Northeastern



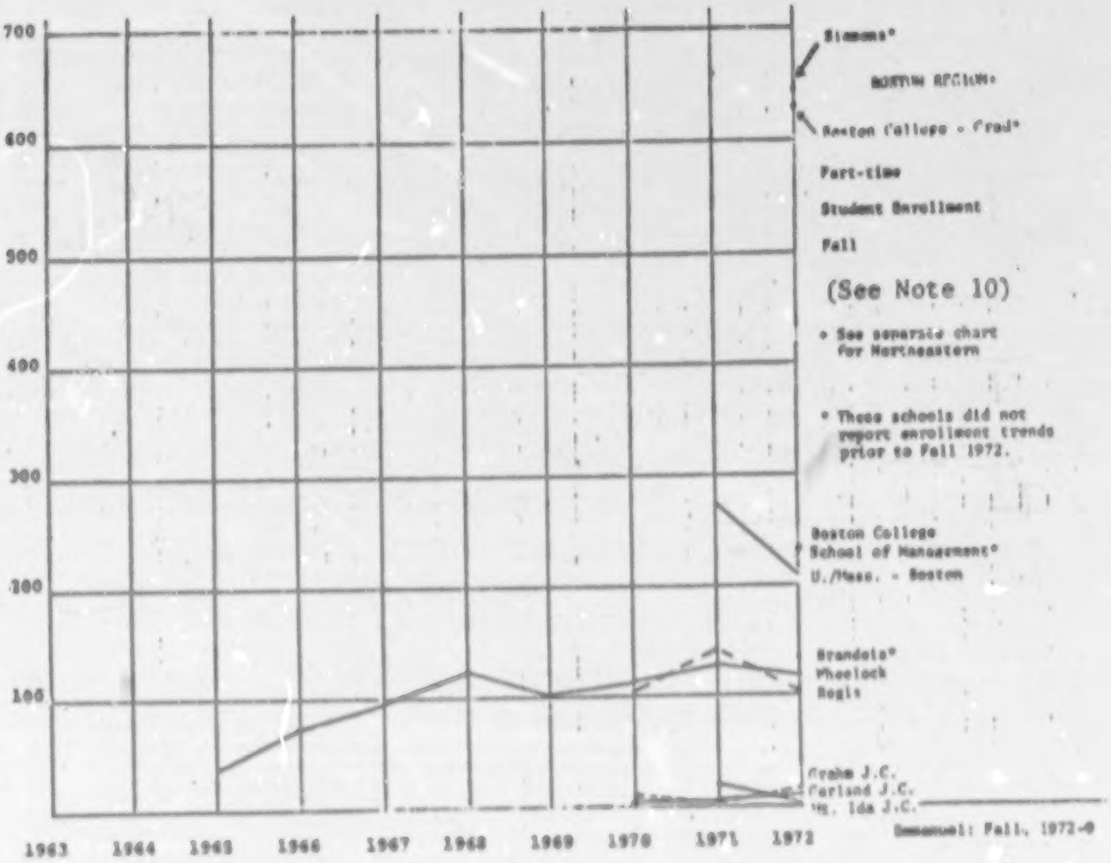
BOSTON REGION

Continuing Education

Student Enrollment

Fall

BEST COPY AVAILABLE



BOSTON REGION:

Part-time

Student Enrollment

Fall

(See Note 10)

- See separate chart for Northeastern

* These schools did not report enrollment trends prior to Fall 1972.

BEST COPY AVAILABLE

II.B.1. Numerical Data by Institution and Region: Enrollment Totals for Fall 1972.

Introduction.

The following total enrollment charts for fall 1972 have been compiled from data obtained from the participating schools to present a numerical characterization of the present form part-time and continuing education takes in Massachusetts. The information has been presented by region, with separations between public and private institutions made for each.

The only area which might lead to confusion for the reader is that of omitted information causing the symbol "N.R." to appear all too frequently. Although much of the information solicited by the formats which is included on these charts could possibly be found in other sources, we have attempted to keep to a minimum the amount of secondary source material used for the entries in order to retain a high degree of accuracy and similarity of information. At times, it has been necessary to refer to course listing, for example, to obtain certain bits of input which were not included on the formats. Many other times, the information which was not included was impossible to obtain. As a result, "N.R." replaces the figure. In order to indicate the incompleteness of some totals, we have placed parentheses around all totals including a "no response" entry.

Another area of difficuty encountered was internal inconsistencies within the individual Format. The same enrollment information is requested several times in different forms, and frequently totals compiled in one manner would differ from those compiled in another. Often complete reconciliation was impossible, and logical interpolation had to be made. When such changes from totals on the Formats were made, an asterisk appears on the charts.

BEST COPY AVAILABLE

Methodology for Compilation of Enrollment Totals

The "Enrollment Totals for Fall 1972" section is a compilation of numerical data obtained from diverse sources. It was initially intended to generate the totals and subtotals by referring directly to specific sections of the Data Formats. These sections solicited information on enrollment for each institution by headcount and by course registrations.

For various reasons, the information provided by institutions was often incomplete and in certain cases totally missing. This necessitated a search through other sections of the Formats, through various catalogues, and other publications by the institution. In certain cases telephone calls were made to fill in the holes left by the other sources. In many cases, rather large discrepancies were discovered in information provided by an institution in different parts of the Format. For example, the breakdown requested on number of students taking a certain number of courses is another way of obtaining registrations for fall 1972. There were also several places where headcount can be found.

If none of these parts revealed the totals for the Totals' Chart, the requested inventory of all courses offered regularly and specially for continuing education provided the number of students, courses and registrations by totalling those courses listed for the Fall semester. Headcount by program for fall 1972, and the breakdown between matriculated and nonmatriculated students was also requested. At times it was necessary to pull that information off this particular chart since it was listed nowhere else in the Format.

Besides being a source of actual information to be used in the Totals' Chart, the various approaches served as a crosscheck--to verify, by consistency--the numbers reported. Unfortunately, this method of crosschecking uncovered many discrepancies between the numbers in one section and supposedly, the same number in a different section. In order to reconcile the discrepancies, telephone calls were made and further data was requested. It turned out that different sources within the institutions used for completing the Data Formats contained different data. The method of crosschecking was employed in order to insure consistency for the data base to be generated.

The section entitled "Workshops/Conferences" in the Totals' Chart might require some explanation. The information for this column was obtained usually from an "Inventory of Special Programs" requested. The data reported in this chart is reflected in two parts of the Totals' Chart. In the "Workshops/Conferences" section one listed all special programs which did not meet on a regular basis. Therefore, this column represents seminars, several-day conferences and special workshops which were held throughout the fall of 1972. In most cases these were short meetings of professionals concerned with their own fields of interest. The part of this "Special Program" chart which revealed programs meeting on a regular basis over the fall period is included in

BEST COPY AVAILABLE

the headcount and registration figures and was added to the totals obtained elsewhere in the Formats. In certain cases, the institution had already considered its special programs in the overall program totals. When the reported totals were augmented with the special program enrollments, an asterisk appears in the Totals' Chart.

As mentioned earlier, catalogues from some of the institutions were used as data sources, but only as a last resort when no other source was available. The only possibly relevant information which was obtained from the catalogues was the approximate number of courses offered. The numbers obtained in this way were placed in parentheses to demonstrate possible imprecision.

When information was unobtainable from any of the sources mentioned above, it was recorded as an N.R. (not reported) on the Totals' Chart. When a particular institution did not have a continuing education or a part-time program, N.P. (no program) was recorded in the chart.

Divided into five geographic regions, a total for private and public institutions can be found at the end of each region as well as a percentage figure showing the relationship between the regional totals and those of the state. In an additional totals' chart a more detailed breakdown between the public and private sectors can be found. The public sector is broken down between community colleges, state colleges, University of Massachusetts and several public but unique institutions.* This also gives a breakdown between graduate-undergraduate, matriculated-nonmatriculated students in credit or noncredit courses for part-time in full-time programs and for continuing education programs. The figures for this additional chart were taken directly from the Totals' Chart.

---

* Southeastern Massachusetts University, Lowell Technological Institute, Quincy and Newton Junior Colleges.

BEST COPY AVAILABLE

ENROLLMENT TOTALS BY REGION AND INSTITUTION

WESTERN REGION TOTALS REPORTED FOR FALL 1972 — INSTITUTIONS	Holyoke Community College	Springfield Technical Comm. Coll.	Amer. Inter College Undergrad.	Amer. Inter College Grad.	Western N.E College Undergrad.	Western N.E College Grad.	Springfield College	Westfield State Coll. Undergrad.	Westfield State Coll Grad.	U. Mass. Amherst Undergrad.	U. Mass. Amherst Grad.	Greenfield Community College	North Adams State Coll. Undergrad.
CONTINUING EDUCATION													
HEADCOUNT CONTINUING STUDIES													
Matriculated	837	N.R.	398	495	815	1050	N.R.	199	373	N.R.	46	35	111
Nonmatriculated	286	N.R.	---	---	77	4	N.R.	257	816	N.R.	13	417	165
TOTAL:	1123	2002*	398	495	892	1054	146	456	1161*	1533	59	452	276
REGISTRATIONS													
Credit Courses	1613	N.R.	734	750	1766	2798	252	--2203--		N.R.	N.R.	624	517
Noncredit courses	123	N.R.	---	---	--	--		-- 41 --		N.R.	N.R.	590	---
TOTAL: (C. & N.C.)	1736	3414	734	740	1766	2798	252	--2244--		2242	564	1214	517
Workshops/Conferences	*203	65		150	--84--					159	3,000*	30	
NUMBER OF COURSES	N.R.	N.R.											
Credit			--99--		--112--		18	N.R.		N.R.	N.R.	29	--46--
Noncredit								N.R.		N.R.	N.R.	31	
TOTAL:			--99--		--112--		18	--130--*		--347--		60	--46--
PART-TIME IN REGULAR FULL-TIME PROGRAMS				N.P.		N.P.	N.P.	N.P.	N.P.		N.P.		
HEADCOUNT													
Matriculated	102	14	70		20					37		144	22
Nonmatriculated	---	19	--		2					252		29	18
TOTAL:	102	33	70		22					*289	2495	173	40
REGISTRATIONS										N.R.		N.R.	
Credit Courses	146	61	120		41								43
Noncredit Courses	---	--	---		--								--
TOTAL:	146	61	120		41								43

WESTERN REGION TOTALS REPORTED FOR FALL 1972 — INSTITUTIONS	North Adams State Coll. Grad.	Berkshire Community College		Totals for Public Institutions	Totals for Private Institutions	Totals for Western Region	Regional Percentage-Total State						
CONTINUING EDUCATION													
HEADCOUNT CONTINUING STUDIES													
Matriculated	157	--											
Nonmatriculated	311	--											
TOTAL:	468	985		3070	2985	11,500	12.0						
REGISTRATIONS													
Credit Courses	621	--											
Noncredit courses	--	--											
TOTAL: (C. & N.C.)	621	--		6330	12,552	18,882	(12.7)						
Workshops/Conferences	--			158	3457	3615	53.0						
NUMBER OF COURSES													
Credit													
Noncredit													
TOTAL:													
PART-TIME IN REGULAR FULL-TIME PROGRAMS	N.P.												
HEADCOUNT													
Matriculated													
Nonmatriculated													
TOTAL:		118		3250	92	3342	17.3						
REGISTRATIONS		N.R.											
Credit Courses													
Noncredit Courses													
TOTAL:				161	(250)	(411)	(3.1)						

KEY: N.P. = no program; N.R. = not reported; * = ammended total, corrected for inconsistencies in reported data.

BEST COPY AVAILABLE

ENROLLMENT TOTALS BY REGION AND INSTITUTION

CENTRAL REGION TOTALS REPORTED FOR FALL 1972 / INSTITUTIONS	Quinsigamond Community College	Assumption Undergrad.	Assumption Grad.	Clark Univ. Undergrad.	Clark Univ. Grad.	Worcester State Undergrad.	Worcester State Grad.	College of the Holy Cross	Worcester Poly-tech. Institute	Anna Maria College for Women	Leicester Junior College	Mt. Wachusett Community College	Worcester J.C. & Cent New England Col. of Tech.
CONTINUING EDUCATION													
HEADCOUNT CONTINUING STUDIES								N.P.			N.P.		
Matriculated	589	51		446		1	218		256	52		264	
Nonmatriculated	1692	7		238		72	699		---	--		531	
TOTAL:	2291	58		715		73	917		256	52		795	
REGISTRATIONS													
Credit Courses	3524	99		1237		150	1126		N.R.	108		1311	
Noncredit courses	7	--		--		----	38		N.R.	---		16	
TOTAL: (C. & N.C.)	3531	99		1237		150	1164		365*	108		1327	
Workshops/Conferences													
NUMBER OF COURSES													
Credit	108	5		70		--60--*			35	14		42	
Noncredit	---	--				--			--	--		2	
TOTAL:	108	5		70		--60--*			35	14		44	
PART-TIME IN REGULAR FULL-TIME PROGRAMS							N.R.						
HEADCOUNT													
Matriculated	15	56	230	--	--	--		--	20	49	--	14	N.R.
Nonmatriculated	2	16	216	149	198	36		27	10	--	7	23	N.R.
TOTAL:	17	72	446	149	198	36		27	30	49	7	37	936
REGISTRATIONS		N.R.	N.R.	N.R.	N.R.								
Credit Courses	26					--		34	35	55	7	52	1685
Noncredit Courses	--					65		--	--	--	--	--	--
TOTAL:	26					65		34	35	55	7	52	1685

CENTRAL REGION TOTALS REPORTED FOR FALL 1972 / INSTITUTIONS	Fitchburg State Coll. Undergrad.	Fitchburg State Coll. Grad.	Framingham State Coll. Undergrad.	Framingham State Coll. Grad.	Dean Junior College		Totals for Private Institutions	Totals for Public Institutions	Totals for Central Region	Regional Percentage Total State			
CONTINUING EDUCATION													
HEADCOUNT CONTINUING STUDIES													
Matriculated	663	597	987	185	39								
Nonmatriculated	130	421	---	855	198								
TOTAL:	793	1018	987	1040	237		1318	7904	9222	10.1			
REGISTRATIONS													
Credit Courses	1156	1443	1357	1310	243								
Noncredit Courses	49	1	15	3	65								
TOTAL: (C. & N.C.)	1205	1444	1372	1313	308		2117	11,506	13,623	(9.2)			
Workshops/Conferences			239					239	239	3.5			
NUMBER OF COURSES													
Credit	--69--		97	11	20								
Noncredit	--71--		--	--	3								
TOTAL:	-110--		97	11	23								
PART-TIME IN REGULAR FULL-TIME PROGRAMS	N.P.	N.P.		N.P.									
HEADCOUNT													
Matriculated					2								
Nonmatriculated					7								
TOTAL:			114		9		989	1140	2129	11.0			
REGISTRATIONS													
Credit Courses			189		15								
Noncredit Courses					-								
TOTAL:			189		15		(146)	2017	(2163)	(16.4)			

KEY: N.P. = no program; N.R. = not reported; * = ammended total, corrected for inconsistencies in reported data.

BEST COPY AVAILABLE

ENROLLMENT TOTALS BY REGION AND INSTITUTION

NORTHEAST REGION TOTALS REPORTED FOR FALL 1972 / INSTITUTIONS	No. Shore Community College	Indicott College	Salem State Undergrad.	Salem State Grad.	Northern Essex Comm. Coll.	Merrimack College	Lowell Tech. Institute Evening	Lowell State Coll. Grad.		Totals for Private Institutions	Totals for Public Institutions	Totals for Northeast Region	Region Percentage-Total State
CONTINUING EDUCATION													
HEADCOUNT CONTINUING STUDIES		N.P.						N.P.					
Matriculated	N.R.		344	512	N.R.	N.R.	1720						
Nonmatriculated	N.R.		1084	915	N.R.	N.R.	559						
TOTAL:	5853*		1428*	1427	1764	681	2279			681	12,751	13,432	14.8
REGISTRATIONS													
Credit Courses	N.R.		1981	2246	N.R.	1160	N.R.						
Noncredit Courses	N.R.		89	11	N.R.	--	N.R.						
TOTAL: (C. & N.C.)	8015		2070*	2257	1986	1160	4758			1160	19,086	20,246	(13.6)
Workshops/Conferences							725				750	750	11.0
NUMBER OF COURSES													
Credit	78		--149--		74	42	145*						
Noncredit	131		--2--		--	--	--						
TOTAL:	209		--151--		74	42	145						
PART-TIME IN REGULAR FULL-TIME PROGRAMS	N.P.		N.P.	N.P.	N.P.	N.P.	N.P.						
HEADCOUNT													
Matriculated		8						212					
Nonmatriculated		--						403					
TOTAL:		8						615		8	615	623	3.2
REGISTRATIONS													
Credit Courses		11						916					
Noncredit Courses		--						---					
TOTAL:		11						916		11	916	927	(7.0)

KEY: N.P. = no program; N.R. = not reported; * = ammended total, corrected for inconsistencies in reported data.

BEST COPY AVAILABLE

ENROLLMENT TOTALS BY REGION AND INSTITUTION

SOUTHEAST REGION TOTALS REPORTED FOR FALL 1972 / INSTITUTIONS	Massasoit Community College	Bridgewater State Coll. Undergrad.	Bridgewater State Coll. Grad.	Stonehill College	Wheaton College	Bristol Community College	Southeast Mass. Univ. Undergrad.	Southeast Mass. Univ. Grad.	Cape Cod Community College	Mass. Maritime Academy			
CONTINUING EDUCATION													
HEADCOUNT CONTINUING STUDIES					N.P.								
Matriculated	N.R.	235	632	185		N.R.	N.R.	N.R.	N.R.	N.R.			
Nonmatriculated	N.R.	1044	1526	587		N.R.	N.R.	N.R.	N.R.	N.R.			
TOTAL:	2143*	1279	2158	772		2100	1256	140	1380	60			
REGISTRATIONS													
Credit Courses	2460	2046	3109	744		2291	1786	205	1403	20			
Noncredit Courses	561	--	--	415		634	13	---	459	50			
TOTAL: (C. & N.C.)	3021*	2046	3109	1159		2925	1799*	205*	1862	70			
Workshops/Conferences													
NUMBER OF COURSES													
Credit	147*	--203--		--		39	--74--		50	1			
Noncredit	39	--	--	13		17	--1--		11	3			
TOTAL:	186	--203--		13		56	--75--		61	4			
PART-TIME IN REGULAR FULL-TIME PROGRAMS	N.P.	N.R.	N.R.	N.P.						N.P.	(Totals on next page)		
HEADCOUNT													
Matriculated					--	N.R.	---	10	10				
Nonmatriculated					22	N.R.	116	--	2				
TOTAL:					22	16	116	10	12				
REGISTRATIONS													
Credit Courses					28	24	174	10	16				
Noncredit Courses					--	--	---	--	--				
TOTAL:					28	24	174	10	16				

SOUTHEAST REGION TOTALS REPORTED FOR FALL 1972 / INSTITUTIONS	Totals for Private Institutions	Totals for Public Institutions	Totals for Southeast Region	Region Percentage-Total State
CONTINUING EDUCATION				
HEADCOUNT CONTINUING STUDIES				
Matriculated				
Nonmatriculated				
TOTAL:	772	10,516	11,288	12.4
REGISTRATIONS				
Credit Courses				
Noncredit Courses				
TOTAL: (C. & N.C.)	1159	15,037	16,196	(10.9)
Workshops/Conferences				
NUMBER OF COURSES				
Credit				
Noncredit				
TOTAL:				
PART-TIME IN REGULAR FULL-TIME PROGRAMS				
HEADCOUNT				
Matriculated				
Nonmatriculated				
TOTAL:	22	(154)	(176)	9.9
REGISTRATIONS				
Credit Courses				
Noncredit Courses				
TOTAL:	28	(224)	(252)	(1.9

KEY: N.P. = no program, N.R. = not reported, * = amended total, corrected for inconsistencies in reported data.

BEST COPY AVAILABLE

ENROLLMENT TOTALS BY REGION AND INSTITUTION

BOSTON REGION TOTALS REPORTED FOR FALL 1972 / INSTITUTIONS	Boston Coll. School of Management	Hebrew Teachers College	Mt. Ida Junior College	Mass. Bay Community College	Tufts University	Curry College	Brandeis University Undergrad.	Brandeis University Grad.	Bentley Coll. Evening & Cont. Ed.	Regis College	Babson College	Wellesley College Undergrad.	Wellesley College Grad.
CONTINUING EDUCATION													
HEADCOUNT CONTINUING STUDIES	N.P.		N.P.							N.P.		N.P.	N.P.
Matriculated		---		156	34	N.R.	26	82	N.R.		736		
Nonmatriculated		140		1975	34	N.R.	1	71	N.R.		---		
TOTAL:		140		2131	68	193	28	153	3248		736		
REGISTRATIONS													
Credit Courses		---		3234	--	62	N.R.		N.R.		1170		
Noncredit Courses		140			218	145	N.R.		N.R.		2		
TOTAL: (C. & N.C.)		140		3234*	218	207	5174*		3163		1172		
Workshops/Conferences					1170					9			
NUMBER OF COURSES													
Credit		--		64	--	17	N.R.		73		47		
Noncredit		10			7	7	N.R.		24		--		
TOTAL:		10		64	7	24	231		97		47		
PART-TIME IN REGULAR FULL-TIME PROGRAMS				N.P.	N.R.	N.P.			N.P.				
HEADCOUNT													
Matriculated	219	70	6				--	20		56		52	[illegible]
Nonmatriculated	12	--	-				73	38		62	--	--	-
TOTAL:	231	70	6				73	58		118		[illegible]	[illegible]
REGISTRATIONS							N.R.	N.R.					
Credit Courses	N.R.	145	6							136		N.R.	N.R.
Noncredit Courses	N.R.	---	-							---	--	N.R.	[illegible]
TOTAL:	310*	145	6							136		97	13

BOSTON REGION TOTALS REPORTED FOR FALL 1972 / INSTITUTIONS	Boston State Coll. Undergrad	Boston State Coll. Grad.	Northeastern Lincoln & Univ. Coll.'s	Northeastern Univ. Grad. School	Boston Univ. Undergrad. *	Boston Univ. Grad. *	Univ. of Mass. - Boston	Emmanuel College Undergrad.	Garland Junior College	Simmons Undergrad.	Simmons Grad.	Wheelock College Undergrad.	Wheelock College Grad.
CONTINUING EDUCATION													
HEADCOUNT CONTINUING STUDIES				N.P.			N.P.	N.P.	N.P.	N.P.	N.P.		
Matriculated	79	1661	1594		436	190						141	1
Nonmatriculated	1049	1507	14,819		3474							---	--
TOTAL:	1128	3168	16,413		3910	190						141	1
REGISTRATIONS													
Credit Courses	711	4646	N.R.		--N.R.--							257	1
Noncredit Courses	721		N.R.		--N.R.--							---	--
TOTAL: (C. & N.C.)	1432*	4646	34,778*		✱ --5474--							257	1
Workshops/Conferences			300									135	
NUMBER OF COURSES													
Credit	--N.R.--		N.R.		--N.R.--								
Noncredit	--N.R.--		N.R.		--N.R.--								
TOTAL:	--245--		1500*		--231--							--12--	
PART-TIME IN REGULAR FULL-TIME PROGRAMS	--N.P.--		N.P.									N.P.	
HEADCOUNT													
Matriculated	--N.R.--			3552	--N.R.--		109	5	10	N.R.	N.R.		125
Nonmatriculated	--N.R.--				--N.R.--		103	4	--	N.R.	N.R.		
TOTAL:	477	3045		3552	80	3331	212	9*	10	327	132		125
REGISTRATIONS	--N.R.--				--N.R.--								
Credit Courses				6067			218	12	27				176
Noncredit Courses							---	--					
TOTAL:				6067			218	12	27	420	637		176

KEY: N.P. = no program; N.R. = not reported; * = amended total, corrected for inconsistencies in reported data.
*All C/E Students for Boston University are enrolled in Metropolitan College
✱ Figure includes all cross-registered students taking C/E courses

BEST COPY AVAILABLE

ENROLLMENT TOTALS BY REGION AND INSTITUTION

BOSTON REGION TOTALS REPORTED FOR FALL 1972 / INSTITUTIONS	Mass. Coll. of Art Undergrad.	Mass. Coll. of Art Grad.	Wentworth Institute	Suffolk University Undergrad.	Suffolk University Grad.	Graham Junior College	Radcliffe College	Harvard University	Lesley College Undergrad.	Lesley College Grad.	Pine Manor	Boston College [illegible]	Boston College Grad.
CONTINUING EDUCATION													
HEADCOUNT CONTINUING STUDIES						N.P.							N.P.
Matriculated	2	30		702	385		N.R.	184	391	98	N.R.	498	
Nonmatriculated	145	123	1009	291	332		N.R.	4685	---	--	N.R.	675	
TOTAL:	147	153	1009	993	717		259	4869	391	98	8	1173	
REGISTRATIONS													
Credit Courses	180	198		1986	1434		62	4512	391	181	N.R.	2255	
Noncredit Courses	---	---	1009	--			230	2358	---	---	N.R.	72	
TOTAL: (C. & N.C.)	180	198	1009	1986	1434		292	6870	391	181*	8*	2327	
Workshops/Conferences													
NUMBER OF COURSES													
Credit	19	---	--	113			3	N.R.	--66--		N.R.	73	
Noncredit	---	---	29	---	113		10	N.R.			N.R.	--	
TOTAL:	19	---	29	113	113		13	189*	--66--		1*	[illegible]	
PART-TIME IN REGULAR FULL-TIME PROGRAMS			N.P.	N.P.	N.P.		N.P.	★ N.R.	N.P.	N.P.	N.P.		
HEADCOUNT													
Matriculated						18							226
Nonmatriculated						--							391
TOTAL:						18							[illegible]
REGISTRATIONS													
Credit Courses						18							N.R.
Noncredit Courses						--							N.R.
TOTAL:						18							933*

BOSTON REGION TOTALS REPORTED FOR FALL 1972 / INSTITUTIONS	Quincy Junior College	Newton Junior College	Lasell Junior College	Emerson College	Newton Coll. of the Sacred Heart	Middlesex Community College							
CONTINUING EDUCATION													
HEADCOUNT CONTINUING STUDIES													
Matriculated	498	N.R.				N.R.							
Nonmatriculated	985	N.R.				N.R.							
TOTAL:	1483	306				2335*							
REGISTRATIONS													
Credit Courses	1385	111				2293							
Noncredit Courses	840	295				172							
TOTAL: (C. & N.C.)	2225	306				2465							
Workshops/Conferences						25							
NUMBER OF COURSES													
Credit	65	14				115							
Noncredit	35	14				23							
TOTAL:	100	28				138							
PART-TIME IN REGULAR FULL-TIME PROGRAMS						N.P.			(Totals on next page)				
HEADCOUNT													
Matriculated				N.R.	3								
Nonmatriculated			40	N.R.	86								
TOTAL:			40	78	89								
REGISTRATIONS													
Credit Courses			80	162	60								
Noncredit Courses			--	---	40								
TOTAL:			80	162	100								

KEY: N.P. = no program; N.R. = not reported; * = a[illegible]ded total, corrected for inconsistencies in reported data.

★ Altho[illegible] not reported, most students enrol[illegible] in conferences & workshops

BEST COPY AVAILABLE

ENROLLMENT TOTALS BY REGION AND INSTITUTION

BOSTON REGION TOTALS REPORTED FOR FALL 1972 INSTITUTIONS	Totals for Private Institutions	Totals for Public Institutions	Totals for Boston Region	Region Percentage-Total State		Totals for Priv. Inst. in State	Totals for Public Inst. in State	Totals for State					
CONTINUING EDUCATION													
HEADCOUNT CONTINUING STUDIES													
Matriculated													
Nonmatriculated													
TOTAL:	34,638	10,851	45,489	50.0		40,394	50,537	90,931					
REGISTRATIONS													
Credit Courses													
Noncredit Courses													
TOTAL: (C. & N.C.)	(65082)	14,686	(79768)	(53.6)		(75845)	(72867)	(148,715)					
Workshops/Conferences	2214		2214	17.1		2372	4446	6818					
NUMBER OF COURSES										110	270		
Credit													
Noncredit													
TOTAL:													
PART-TIME IN REGULAR FULL-TIME PROGRAMS										161	928		
HEADCOUNT													
Matriculated													
Nonmatriculated													
TOTAL:	9335	3734	13,069	67.6		(10446)	8893	19,339					
REGISTRATIONS													
Credit Courses													
Noncredit Courses													
TOTAL:	(9242)	218	(9460)	(71.6)		(9588)	(3625)	(13213)					

II.B.2. Introduction and Notes on Institutional Trend Charts

Information for the history of enrollments (headcount or course registration, see charts) since 1963 at all colleges and universities was derived from the Data Formats which they completed. A breakdown of total enrollments into graduate and undergraduate components was graphed when it was reported by the institution. Unless otherwise noted, the chart reports total student headcounts for the Fall semester of each year. (In the few cases where this information was not given, course registrations were used. For some schools, enrollments were reported on an academic year or calendar year basis.)

The fall 1972 data for these trend charts is generally compatible with the other enrollment chart information. Different methods of reporting student headcounts were sometimes used, and these discrepancies are noted in the section below. Where trend data was not fully reported, fall 1972 enrollments were noted below. (For a more complete explanation of the methodology used to derive fall 1972 statistics, see statement which accompanies those charts.)

NOTES TO TREND CHARTS

Western Region

1. The enrollment trend chart for Westfield State College (Continuing Education) does not include special graduate courses, the enrollment of which totalled 93 in fall 1972.

2. Berkshire Community College did not report a trend history of enrollments.

3. The enrollment trend chart for Greenfield Community College (Continuing Education) does not include community service programs, which had registrations of 730 in fall 1972.

Central Region

4. Assumption College (Continuing Education) did not report a trend history of enrollments. Fall 1972 enrollment was 58.

5. Worcester Polytechnic Institute (part-time) did not report a trend history of enrollments. Fall 1972 enrollment was 30.

6. The enrollment trend chart for Worcester State College (Continuing Education) does not include special programs, which had a fall 1972 enrollment of 38.

Northeast Region

7. The enrollment trend chart for North Shore Community College (Continuing Education) does not include community service programs, which had a fall 1972 enrollment of 1459.

8. The enrollment trend charts for Middlesex Community College (Continuing Education) and Salem State College (Continuing Education) do not include special programs, which had fall 1972 enrollments of 685 and 173, respectively.

Southeast Region

9. Massasoit Community College (Continuing Education) did not report a trend history of enrollments. Fall 1972 enrollment was 2143.

Boston Region

10. The following institutions did not report a trend history of enrollments. Their fall 1972 enrollment is listed below:
Mass. Bay Community College (Continuing Education)-2131
Simmons College-645 (part-time)
114 (Continuing Education)
Lesley College (Continuing Education)-391 (undergraduate)
98 (graduate)
Boston College (part-time)-627 (graduate)
231 (School of Management)
Brandeis University (part-time)-131
Emmanuel College (part-time)-9

11. Wellesley College (Continuing Education) reported enrollment trend data which was inconsistent with other information in their Format. Their fall 1972 enrollment was 52 undergraduate students and 9 graduate students.

12. Hebrew College (Continuing Education) reported estimated averages for enrollment trends. The exact fall 1972 enrollment was 140.

13. The enrollment trend charts for the following schools did not include special programs, the fall 1972 enrollment of which is given below:
Northeastern University-Insurance Institute-455
Boston State College-(Continuing Education)-727
Bentley College (Evening College)-200
(Continuing Education)-838

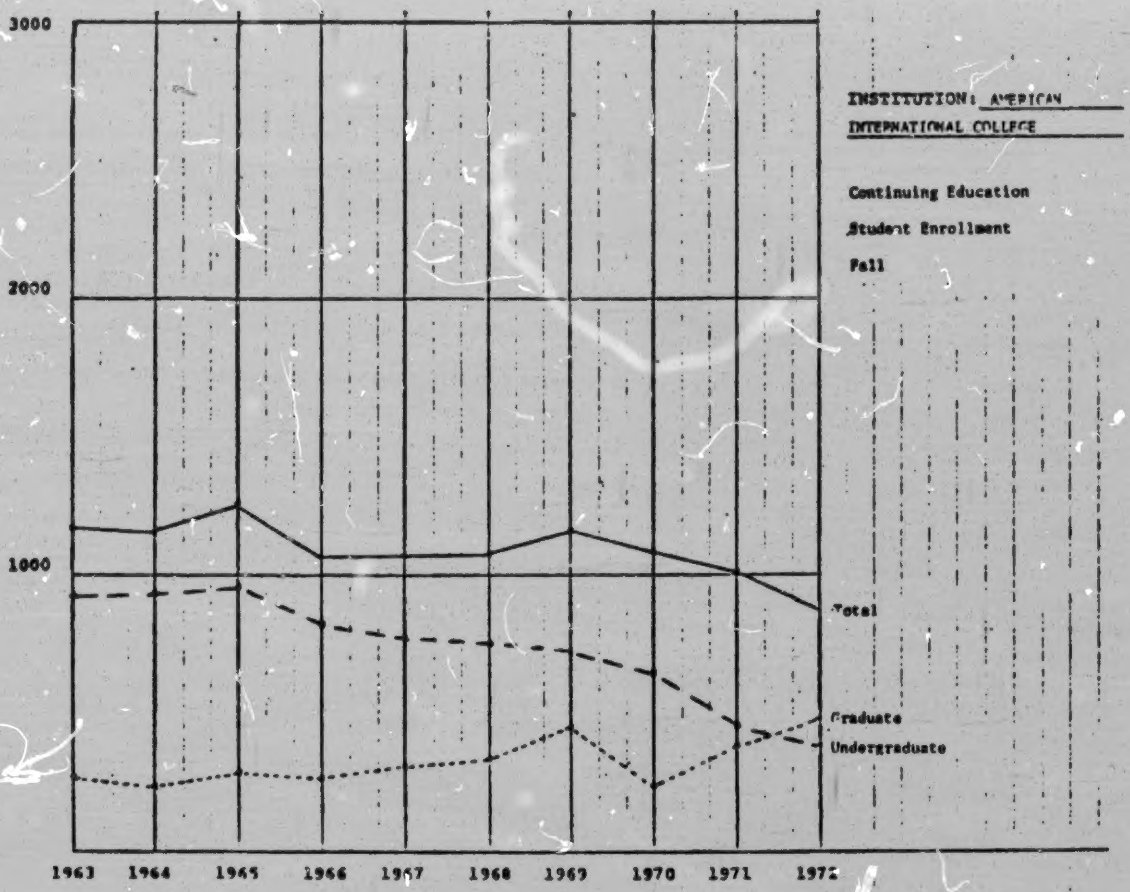
14. The trend charts are given for Boston University Metropolitan College. One excludes enrollments of students cross-registered from other segments of the University.

II.B.3. Trend Charts for Each Institution

SPRINGFIELD AREA

(Western Region)

BEST COPY AVAILABLE

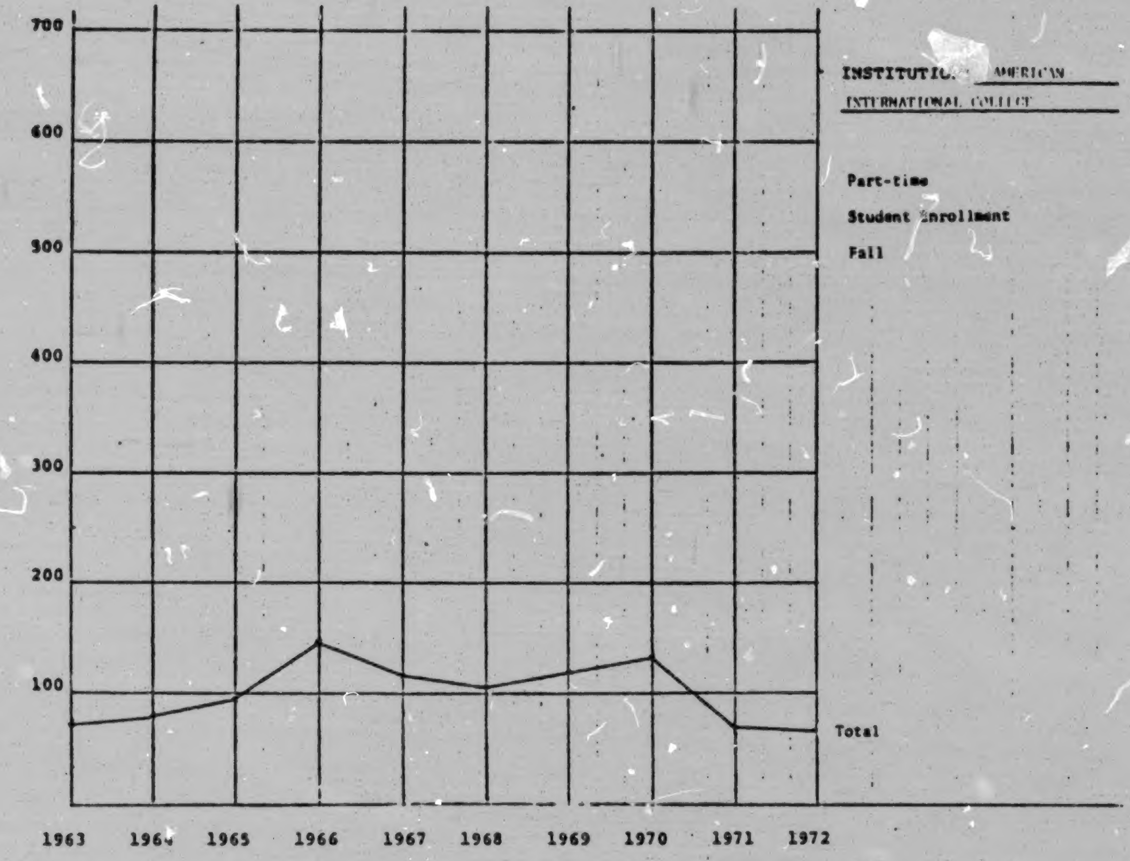


INSTITUTION: AMERICAN INTERNATIONAL COLLEGE

Continuing Education

Student Enrollment

Fall



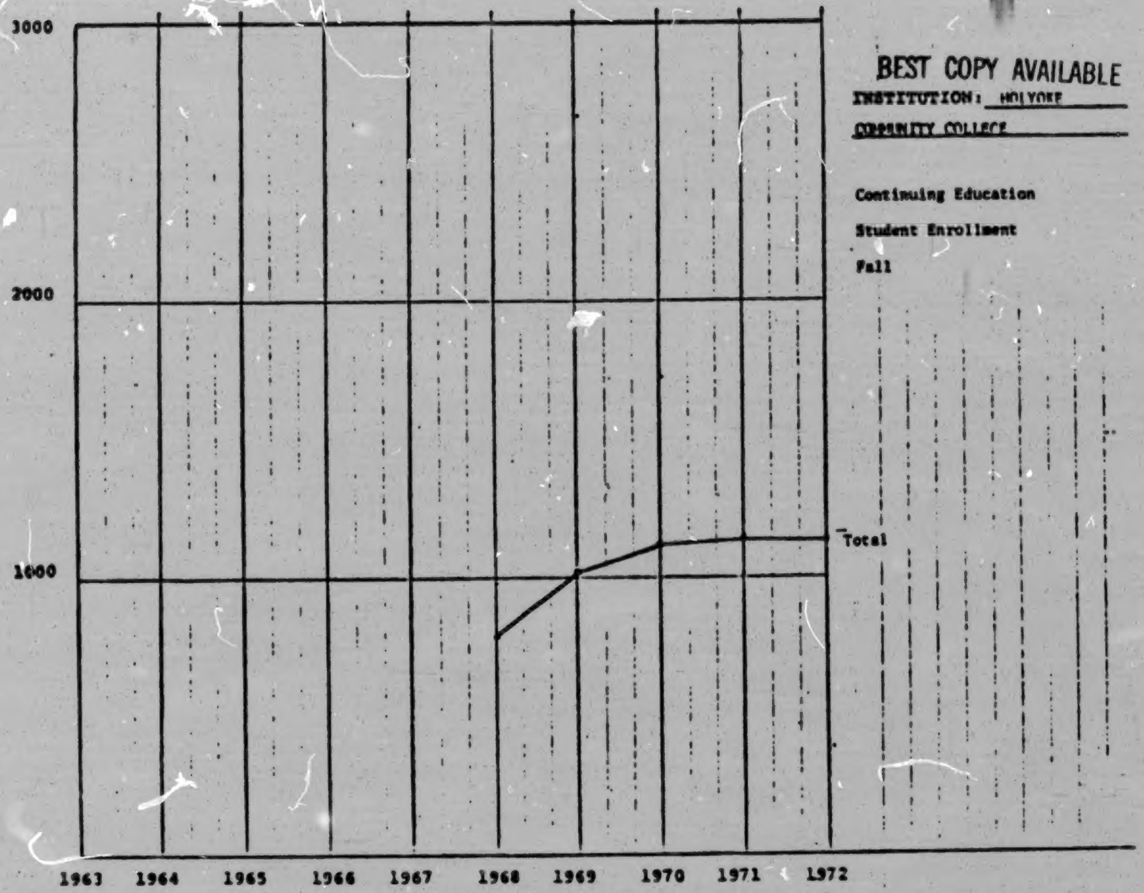
INSTITUTION: AMERICAN INTERNATIONAL COLLEGE

Part-time

Student Enrollment

Fall

BEST COPY AVAILABLE

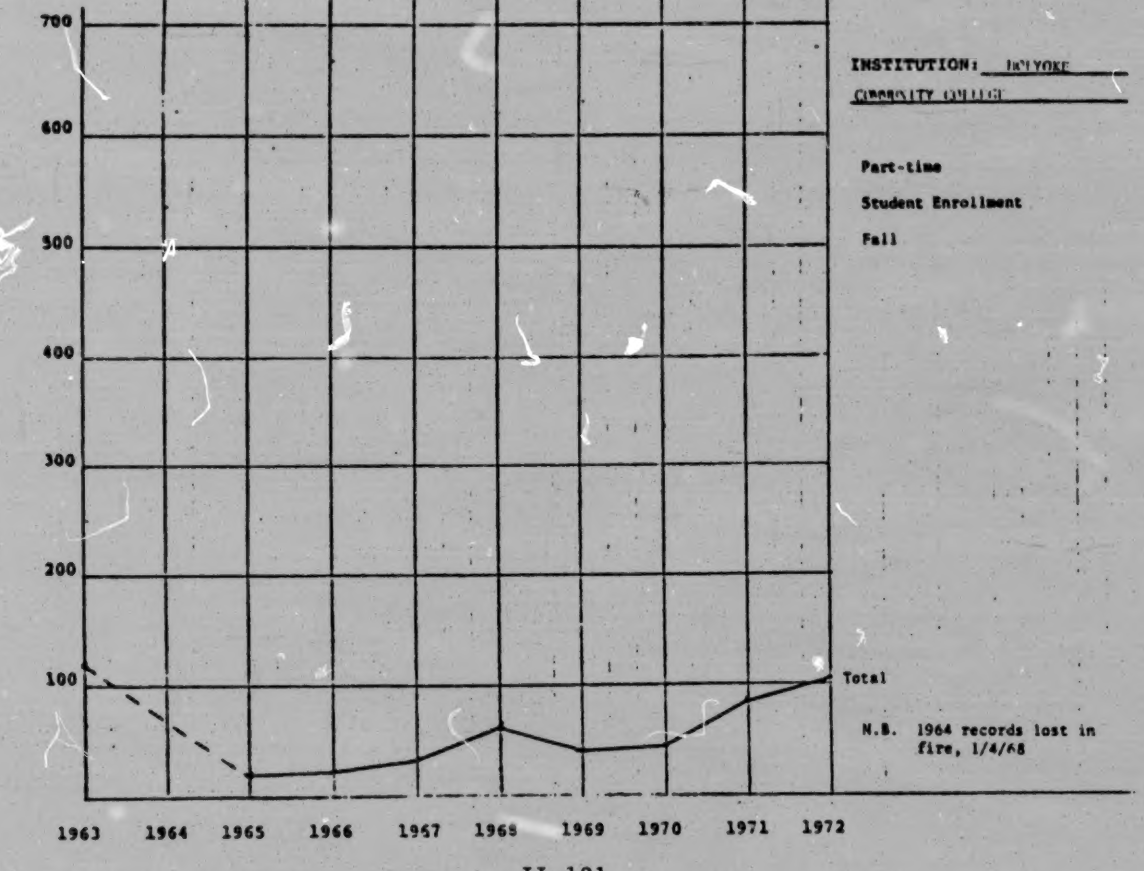


INSTITUTION: HOLYOKE COMMUNITY COLLEGE

Continuing Education

Student Enrollment

Fall



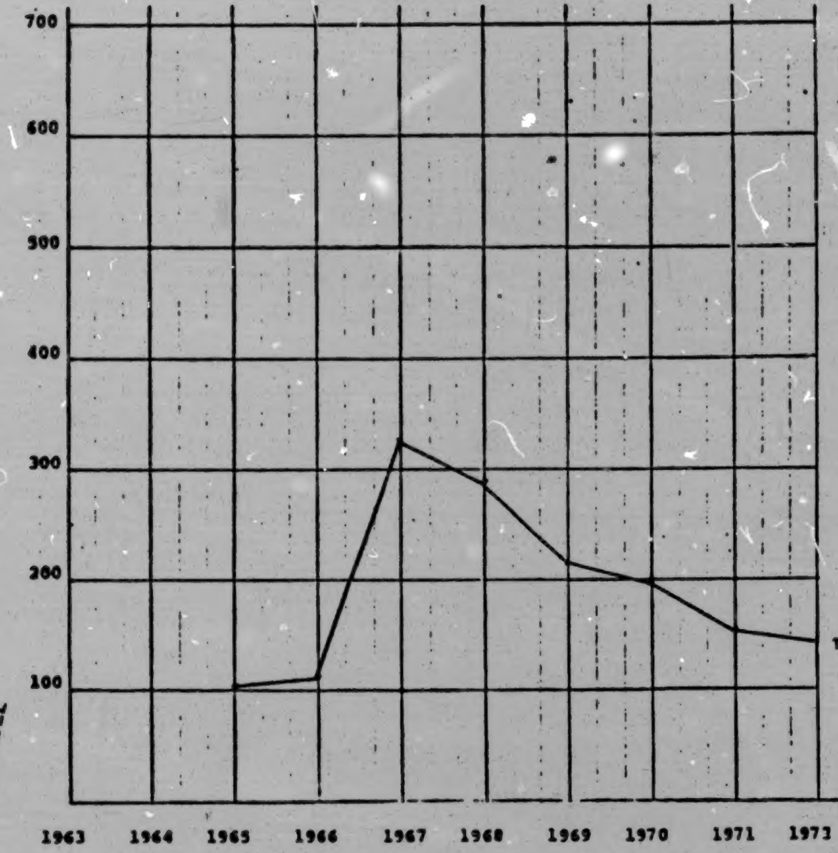
INSTITUTION: HOLYOKE COMMUNITY COLLEGE

Part-time

Student Enrollment

Fall

N.B. 1964 records lost in fire, 1/4/68



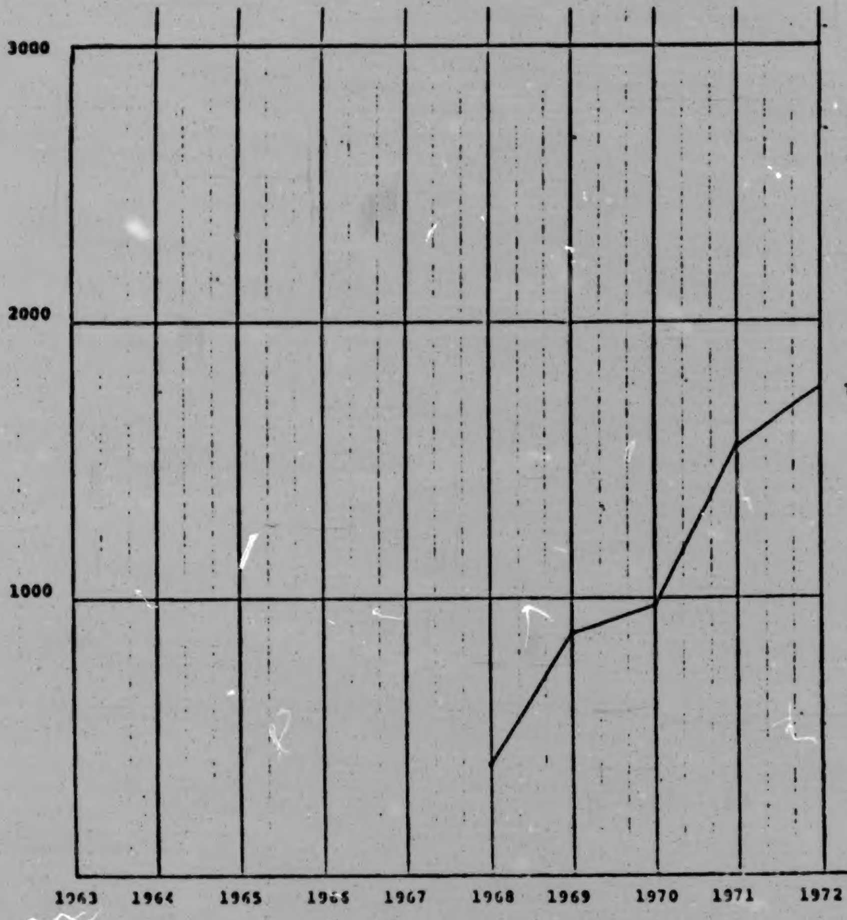
INSTITUTION: SPRINGFIELD COLLEGE

Continuing Education

Student Enrollment

Fall

BEST COPY AVAILABLE



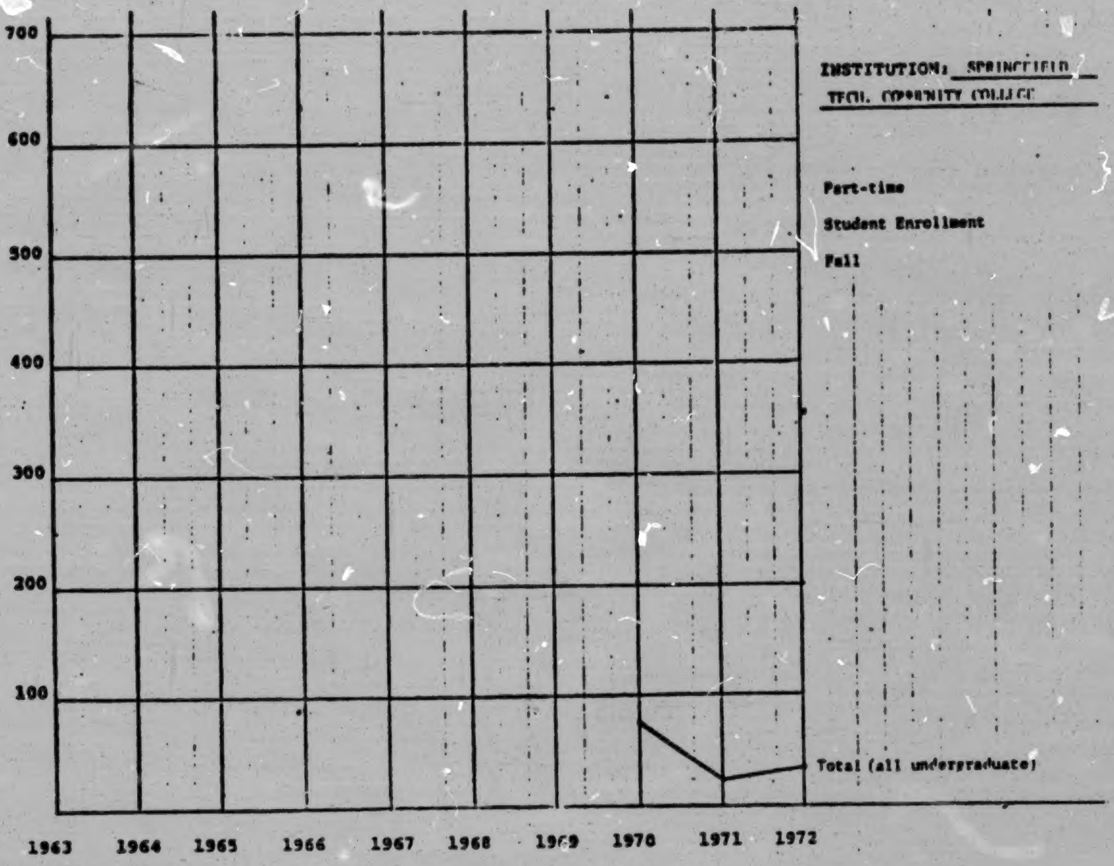
INSTITUTION SPRINGFIELD TECH. COMMUNITY COLLEGE

Continuing Education

Student Enrollment

Fall

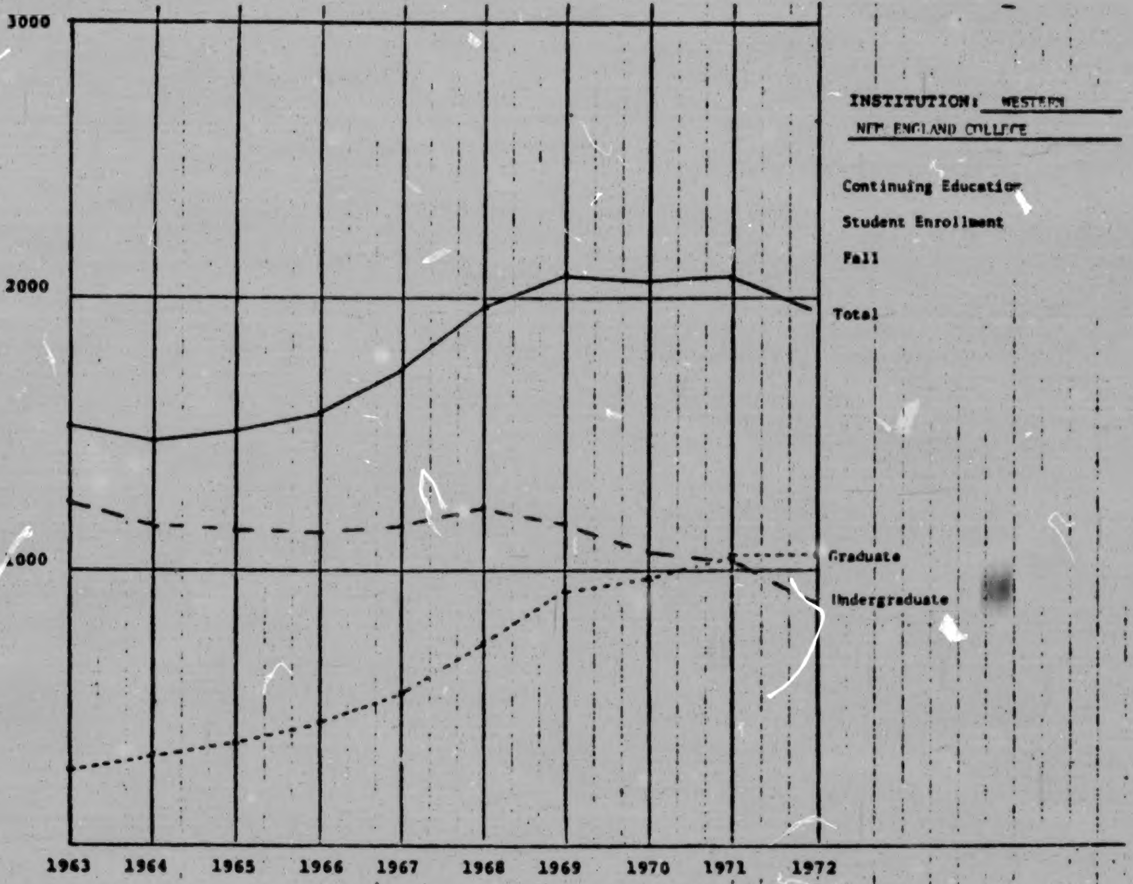
Total (all undergraduate)



INSTITUTION: SPRINGFIELD TECH. COMMUNITY COLLEGE

Part-time
Student Enrollment
Fall

BEST COPY AVAILABLE

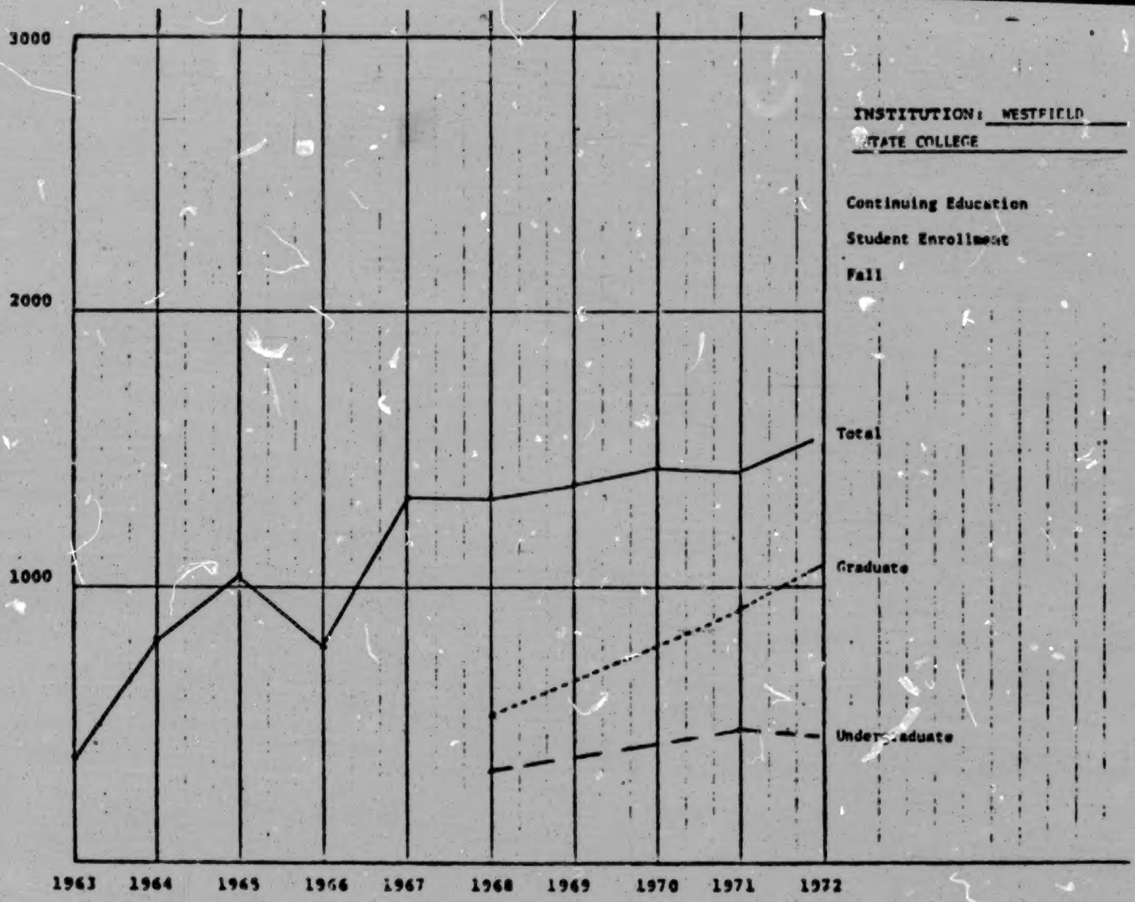


INSTITUTION: WESTERN NEW ENGLAND COLLEGE

Continuing Education
Student Enrollment
Fall

INSTITUTION: WESTFIELD STATE COLLEGE

Continuing Education Student Enrollment Fall

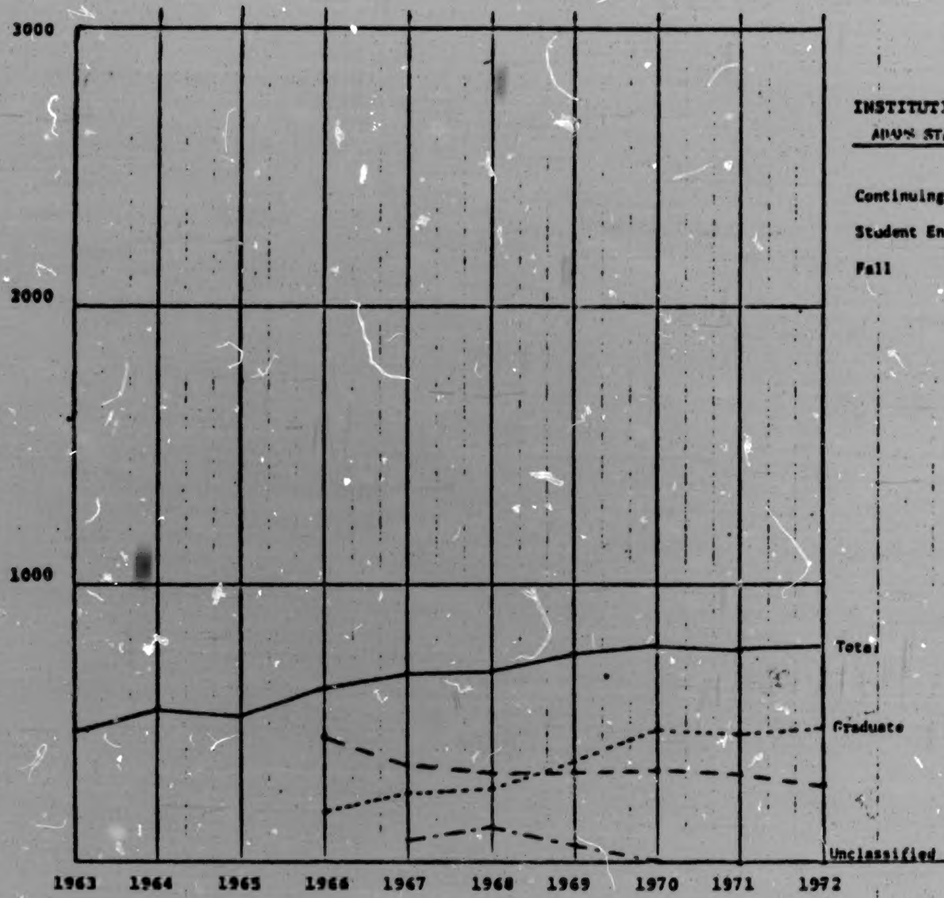


BEST COPY AVAILABLE

PITTSFIELD/NORTH ADAMS AREA

(Western Region)

BEST COPY AVAILABLE

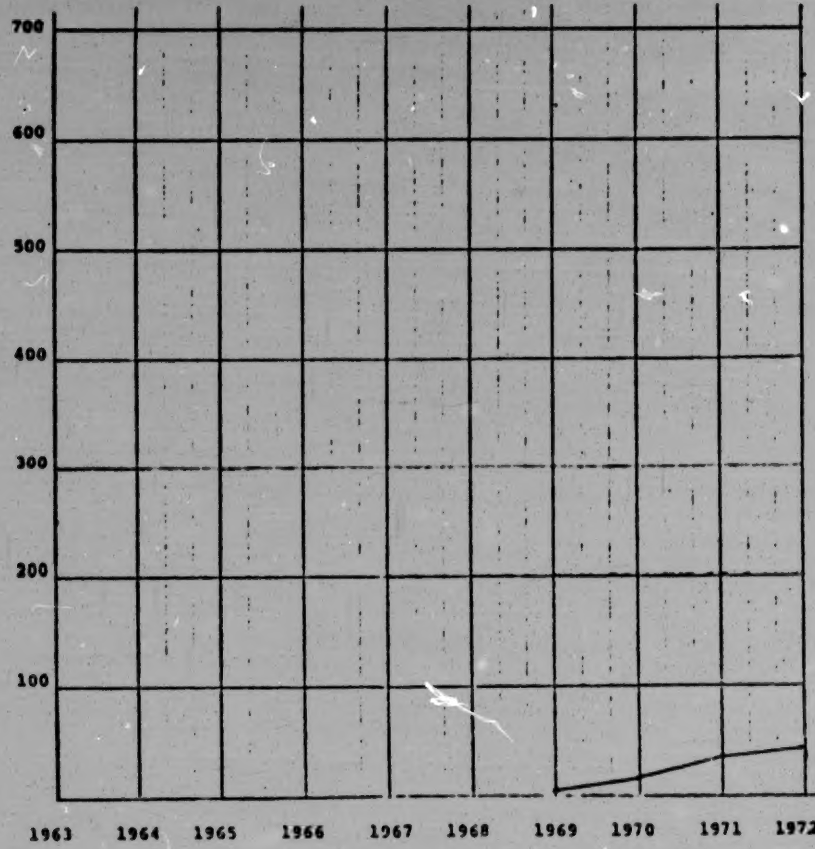


INSTITUTION: NORTH ADAMS STATE COLLEGE

Continuing Education

Student Enrollment

Fall



INSTITUTION: NORTH ADAMS STATE COLLEGE

Part-time

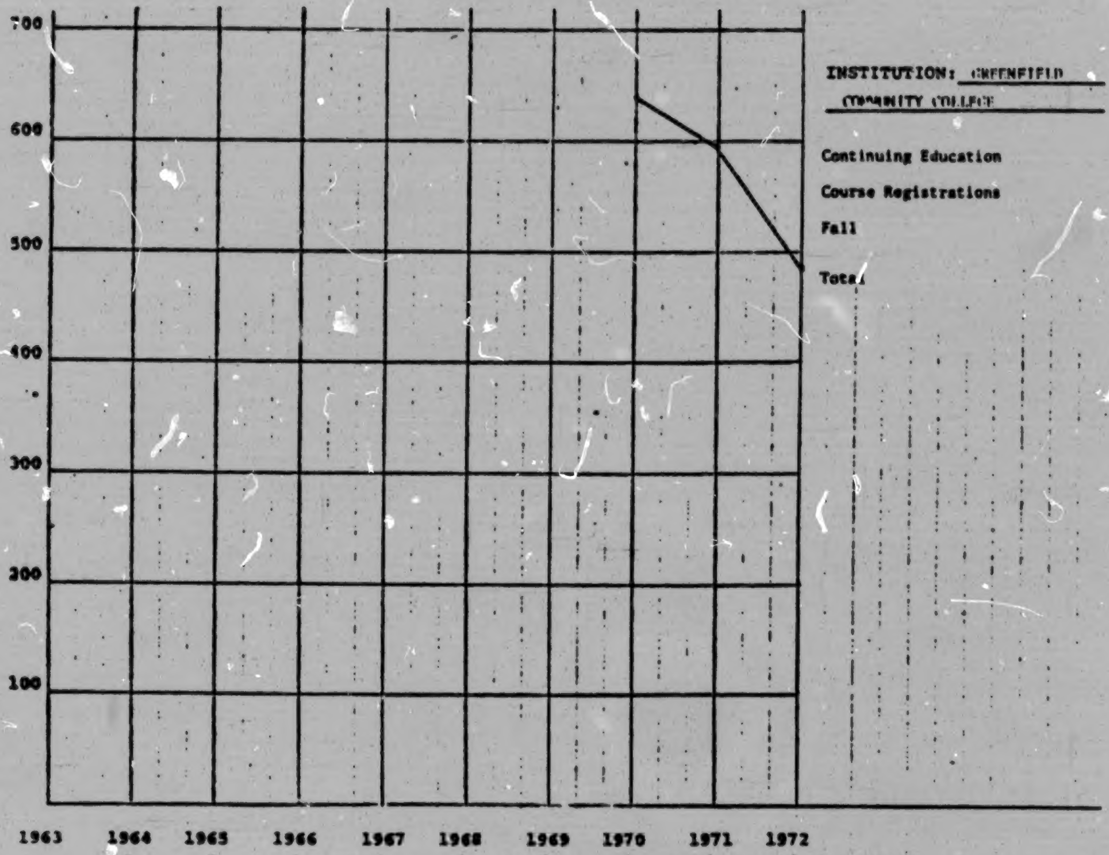
Student Enrollment

Fall

AMHERST/NORTHAMPTON AREA

(Western Region)

BEST COPY AVAILABLE

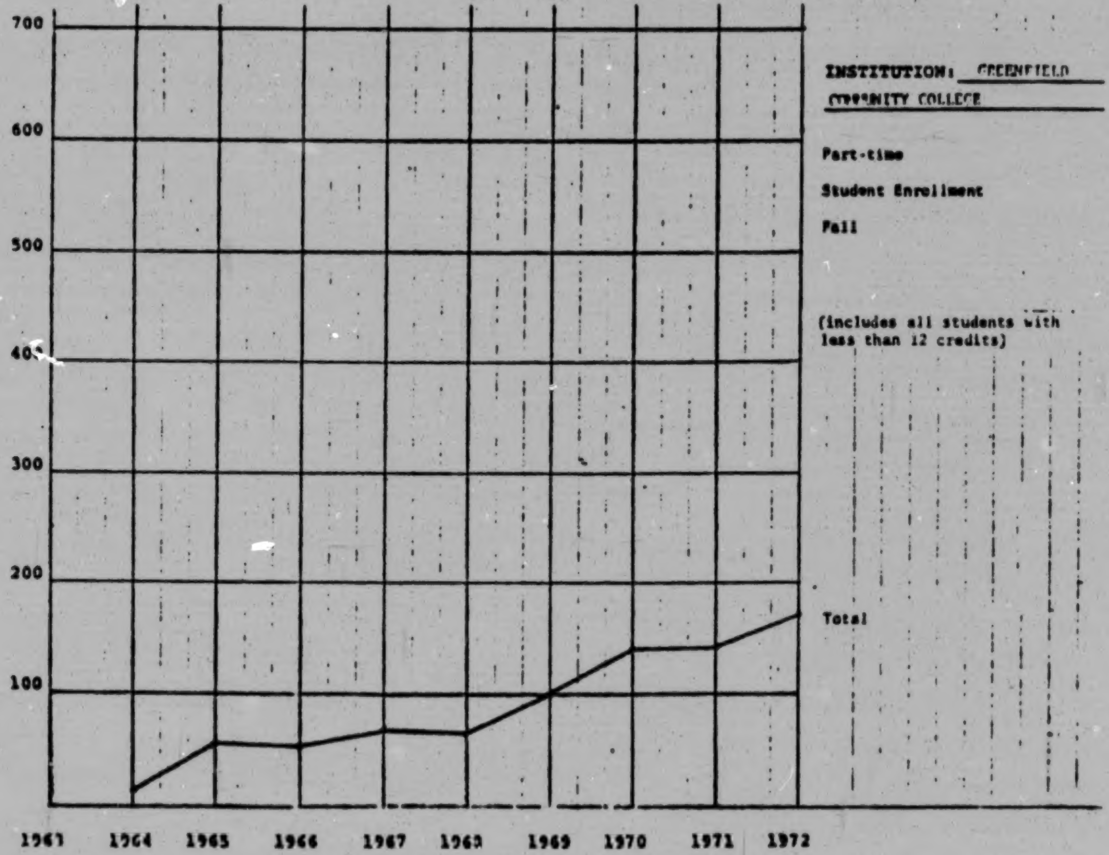


INSTITUTION: GREENFIELD COMMUNITY COLLEGE

Continuing Education

Course Registrations

Fall



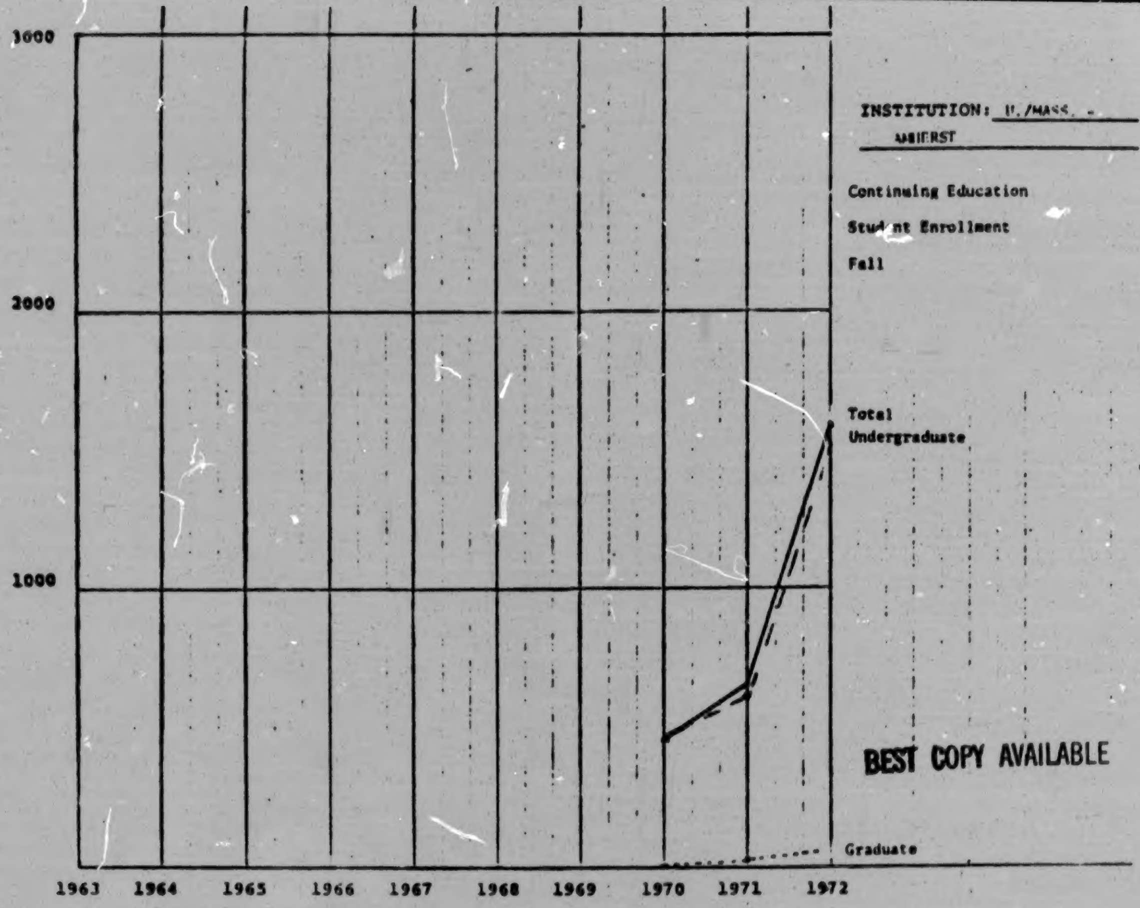
INSTITUTION: GREENFIELD COMMUNITY COLLEGE

Part-time

Student Enrollment

Fall

(includes all students with less than 12 credits)



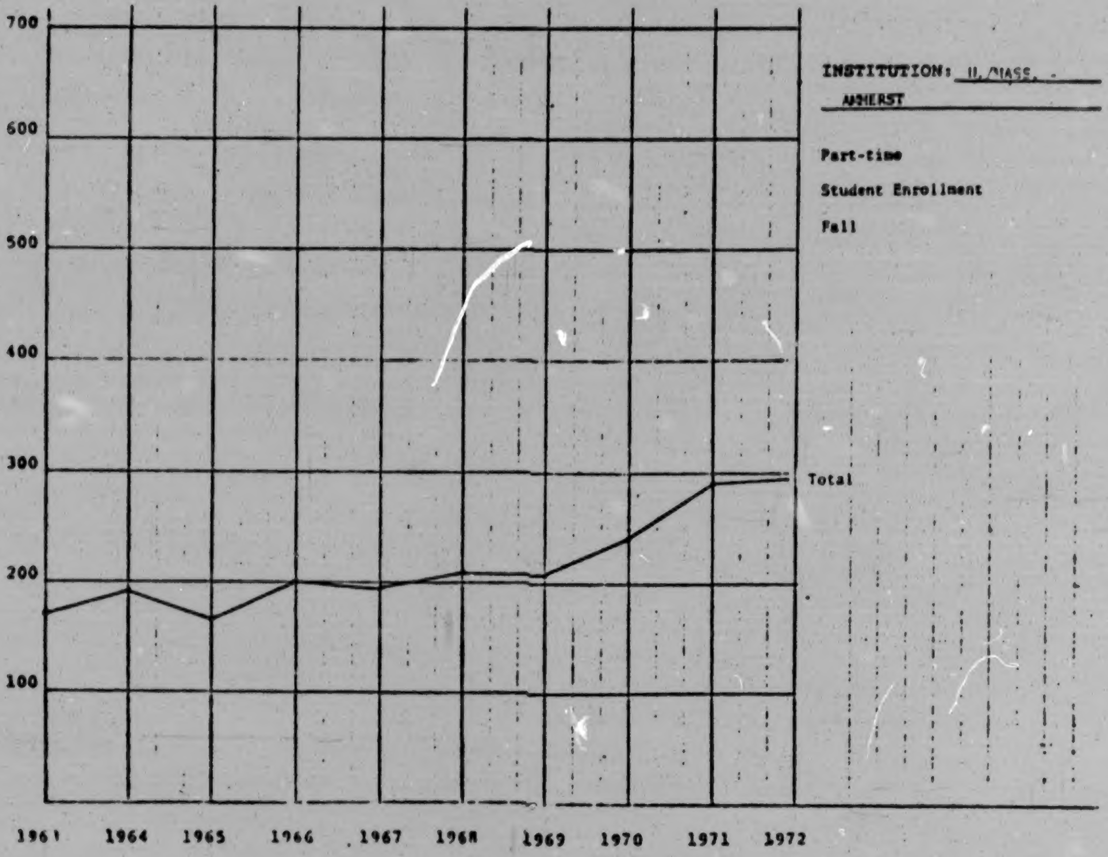
INSTITUTION: U./MASS. - AMHERST

Continuing Education

Student Enrollment

Fall

BEST COPY AVAILABLE



INSTITUTION: U./MASS. - AMHERST

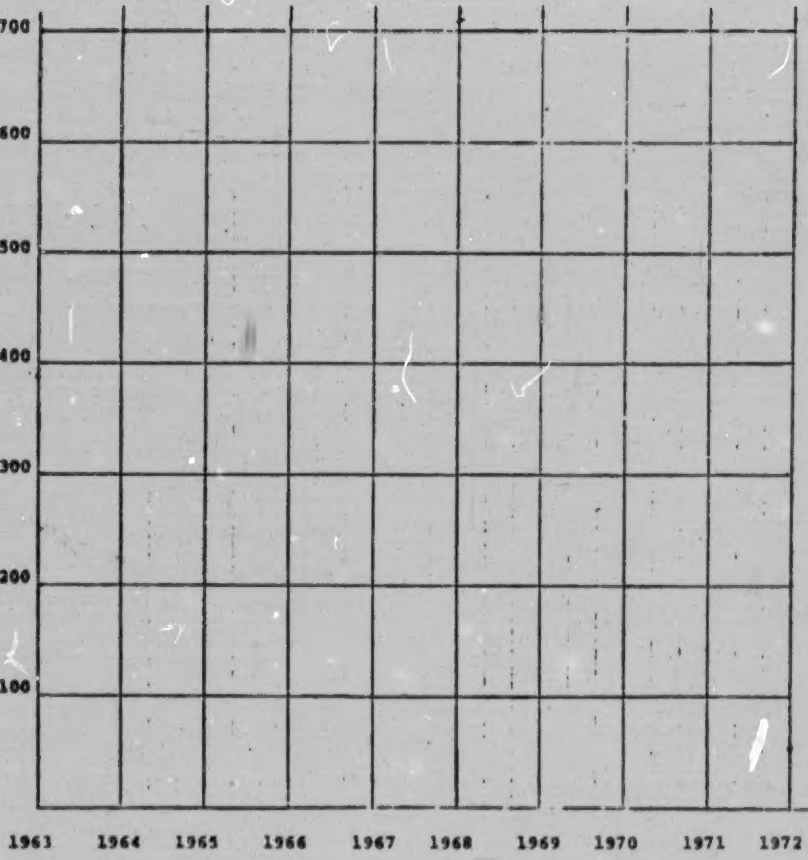
Part-time

Student Enrollment

Fall

WORCESTER AREA

(Central Region)



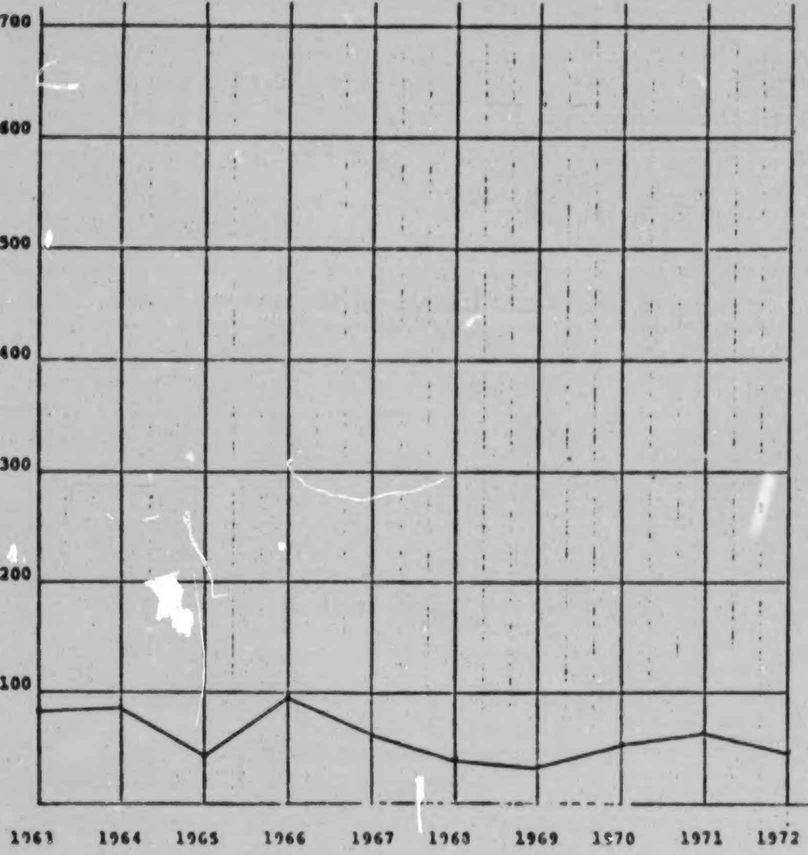
INSTITUTION ANNA MARIA
COLLEGE FOR WOMEN

Continuing Education

Student Enrollment

Fall

BEST COPY AVAILABLE

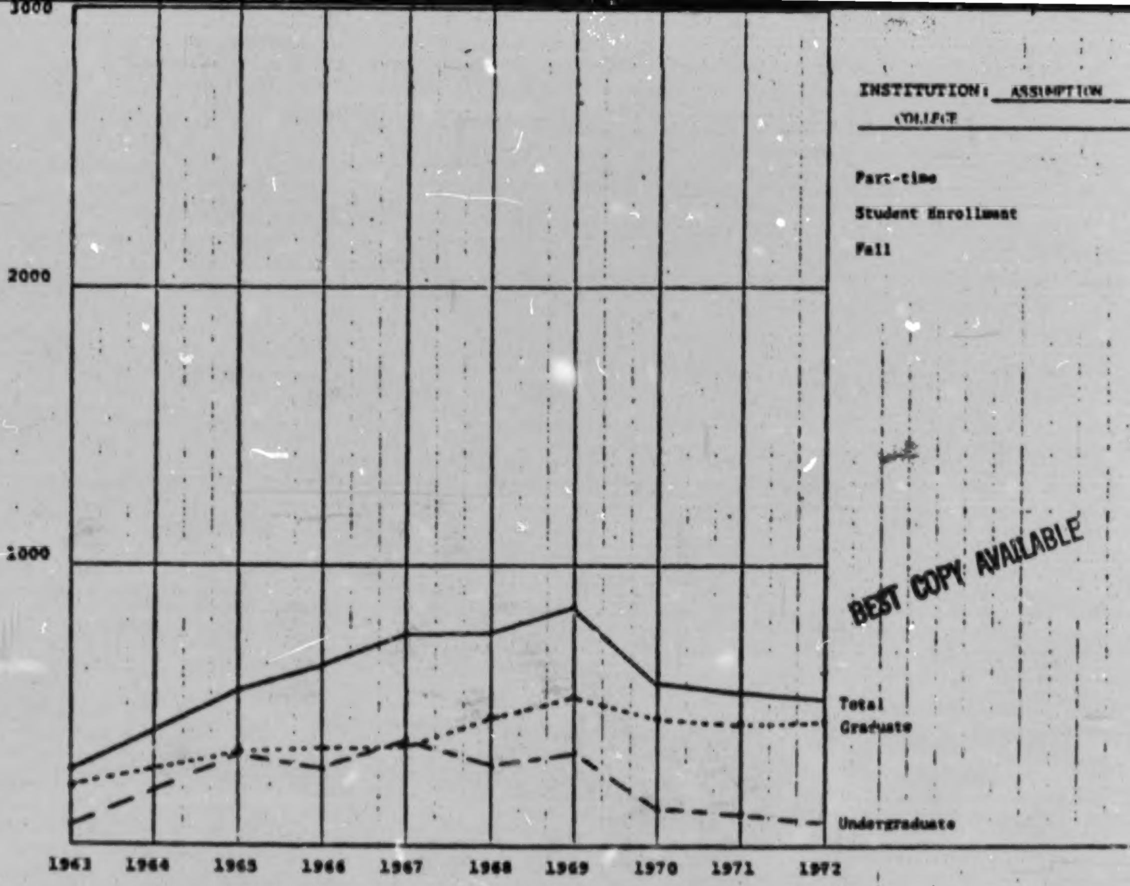


INSTITUTION: ANNA MARIA
COLLEGE FOR WOMEN

Part-time

Student Enrollment

Fall



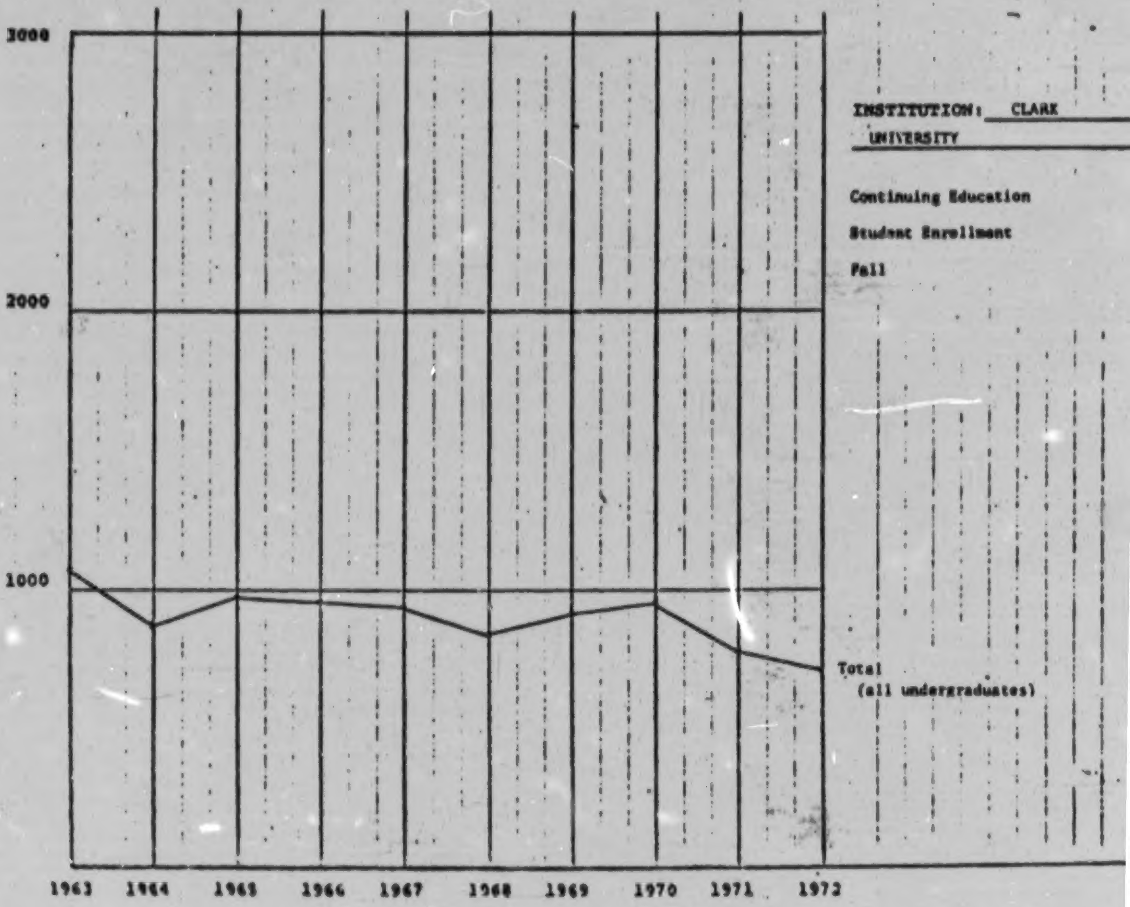
INSTITUTION: ASSUMPTION COLLEGE

Part-time

Student Enrollment

Fall

BEST COPY AVAILABLE

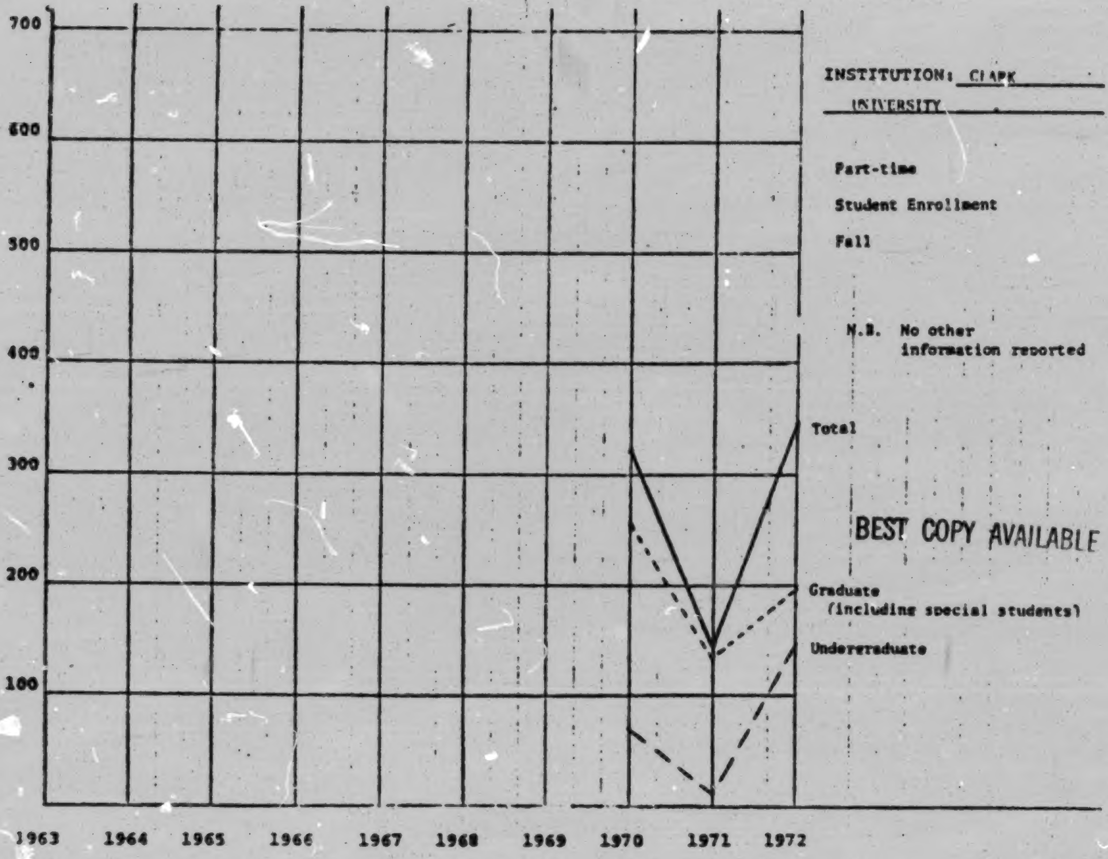


INSTITUTION: CLARK UNIVERSITY

Continuing Education

Student Enrollment

Fall



INSTITUTION: CLARK UNIVERSITY

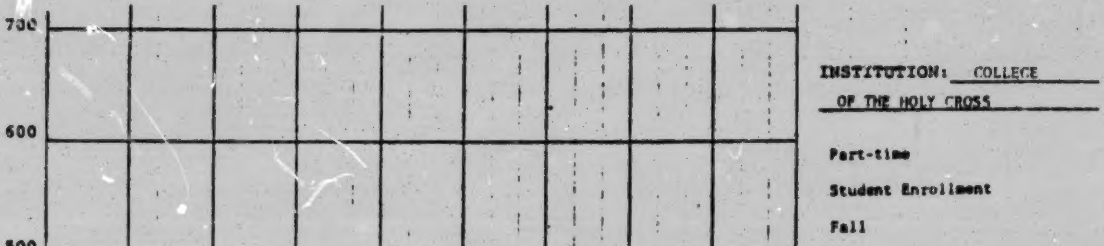
Part-time

Student Enrollment

Fall

N.B. No other information reported

BEST COPY AVAILABLE

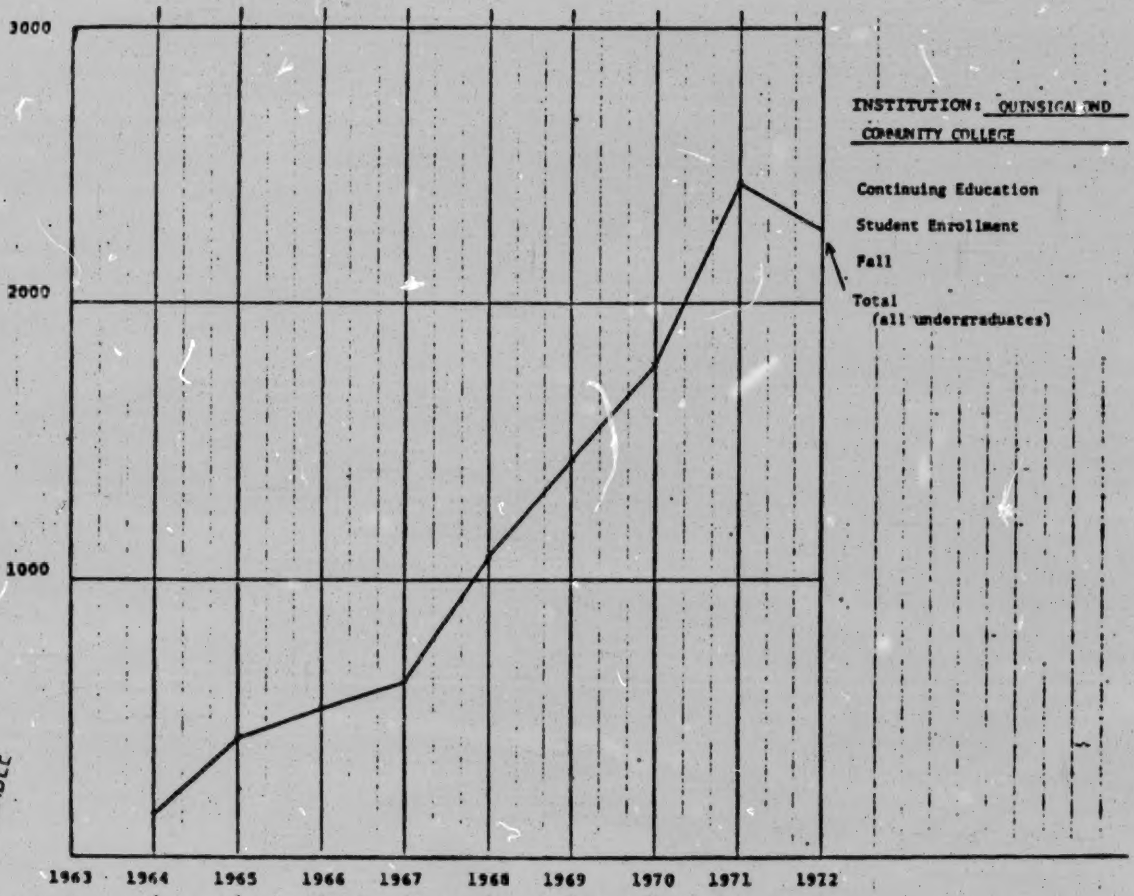


INSTITUTION: COLLEGE OF THE HOLY CROSS

Part-time

Student Enrollment

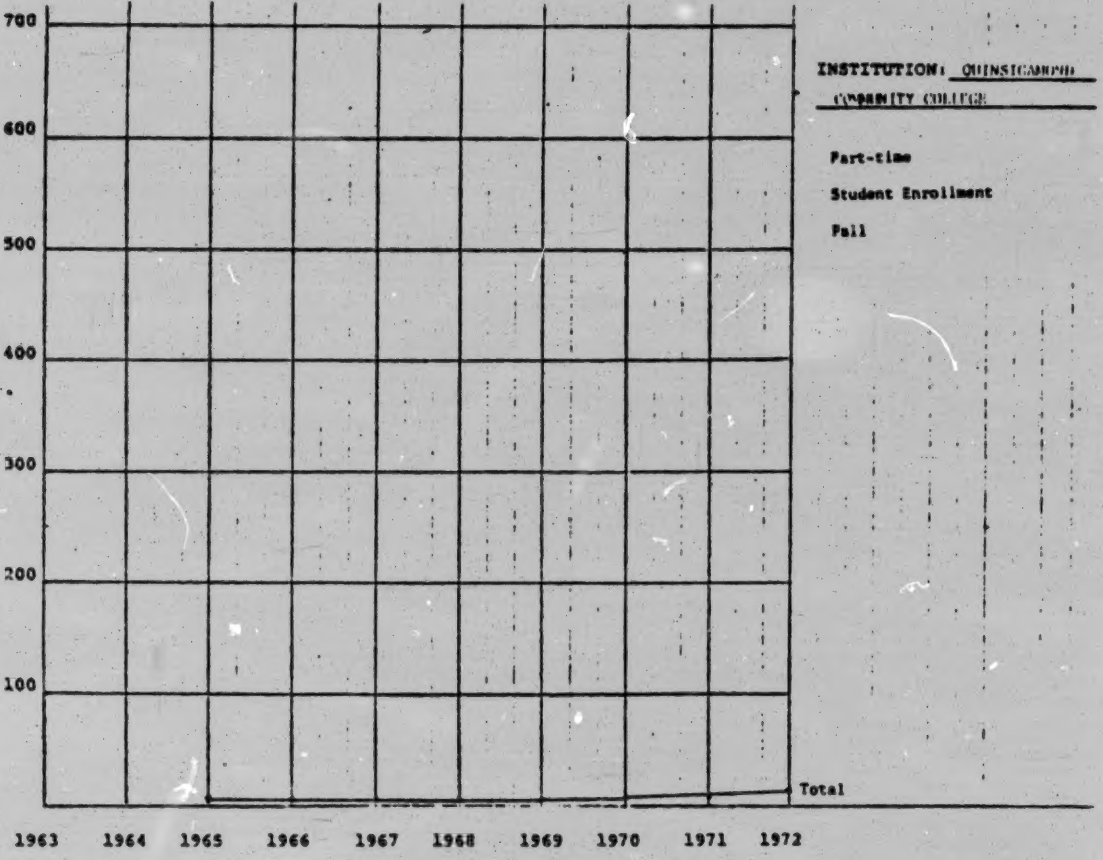
Fall



INSTITUTION: QUINSIGAMOND COMMUNITY COLLEGE

Continuing Education
Student Enrollment
Fall

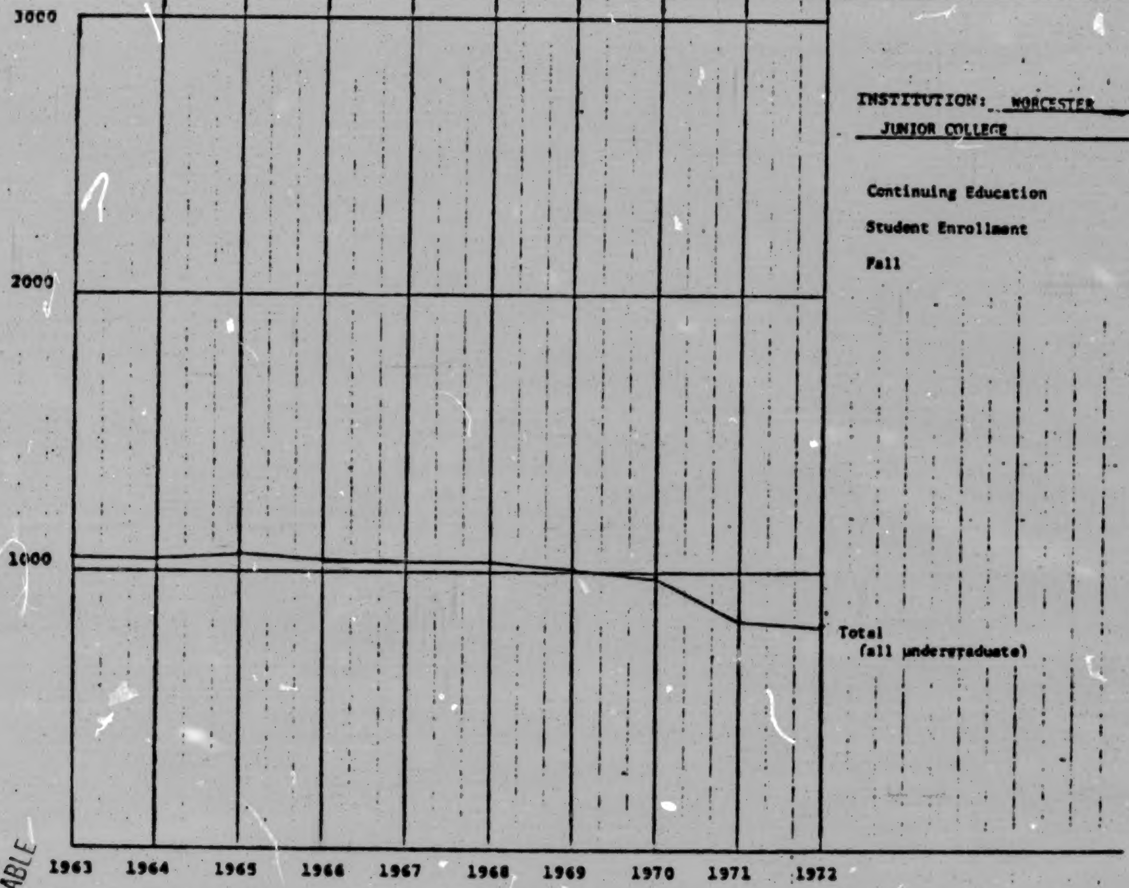
BEST COPY AVAILABLE



INSTITUTION: QUINSIGAMOND COMMUNITY COLLEGE

Part-time
Student Enrollment
Fall

BEST COPY AVAILABLE

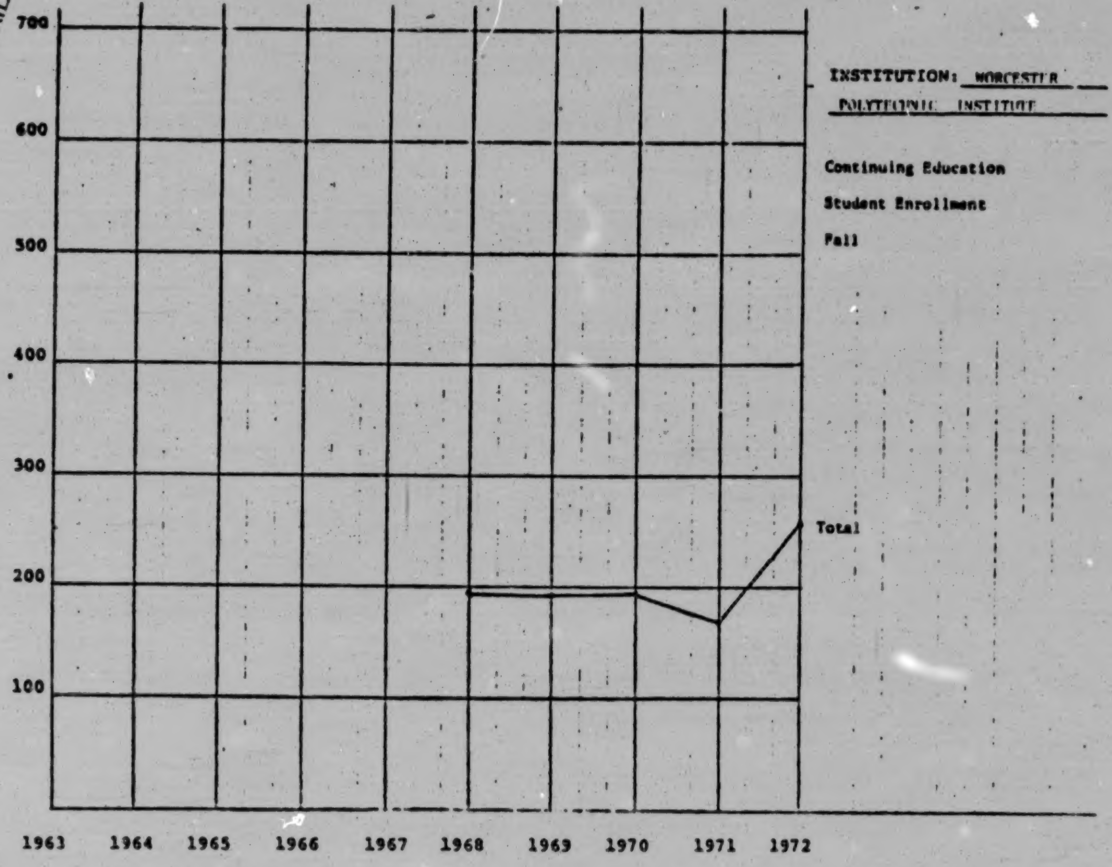


INSTITUTION: WORCESTER JUNIOR COLLEGE

Continuing Education

Student Enrollment

Fall



INSTITUTION: WORCESTER POLYTECHNIC INSTITUTE

Continuing Education

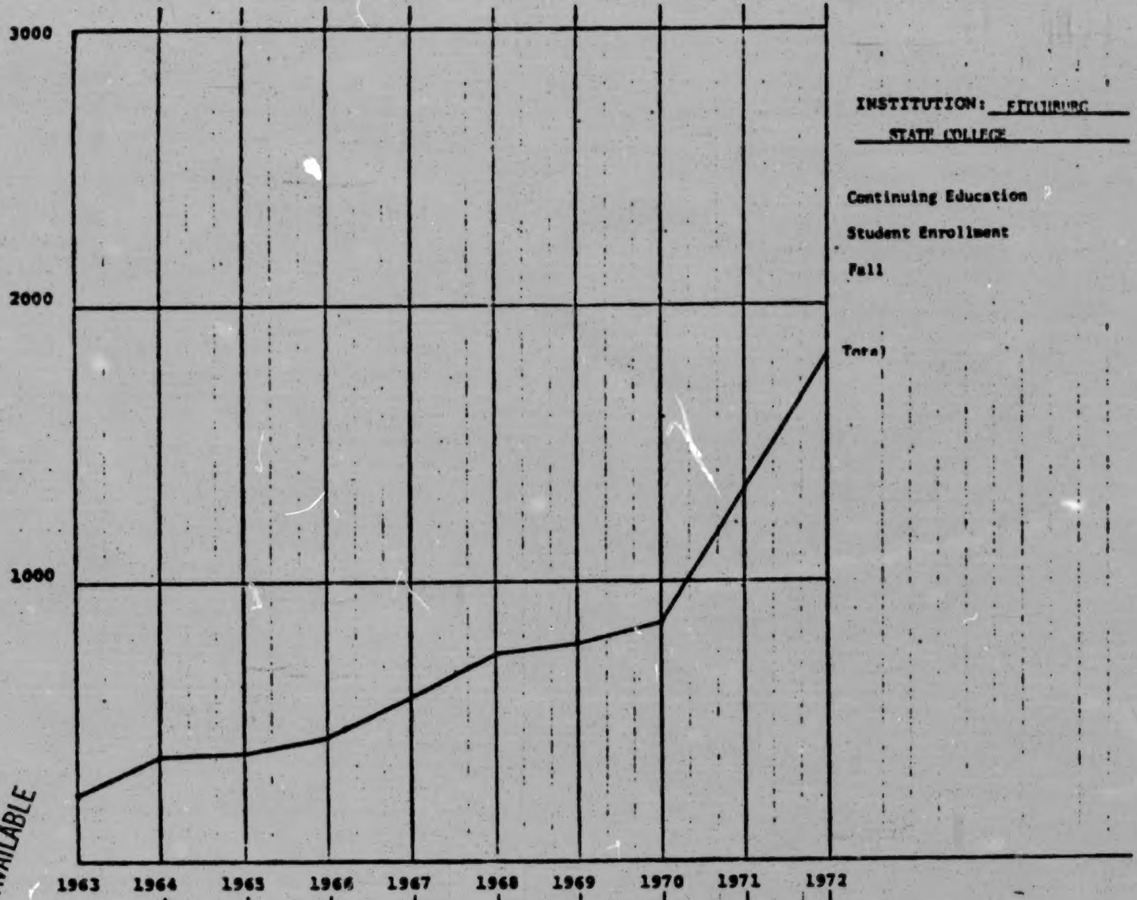
Student Enrollment

Fall

FITCHBURG/GARDNER AREA

(Central Region)

BEST COPY AVAILABLE

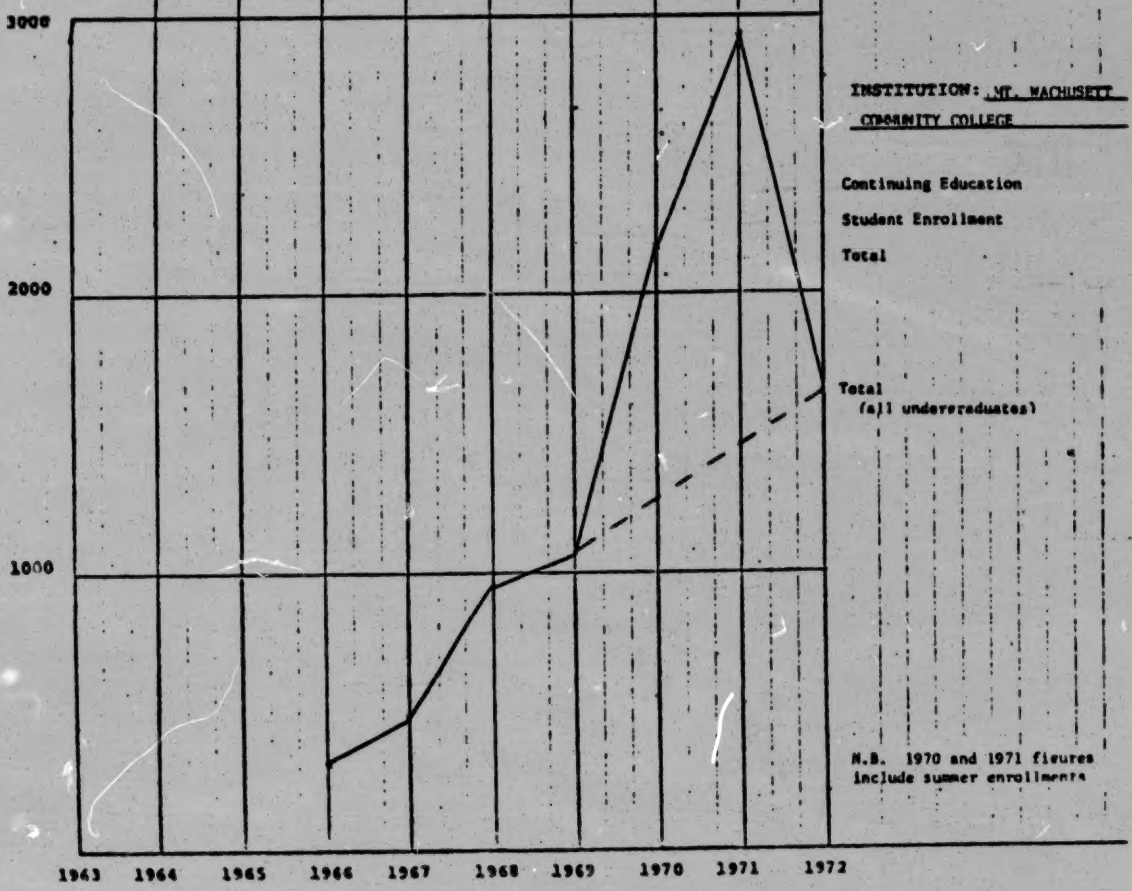


INSTITUTION: FITCHBURG STATE COLLEGE

Continuing Education

Student Enrollment

Fall



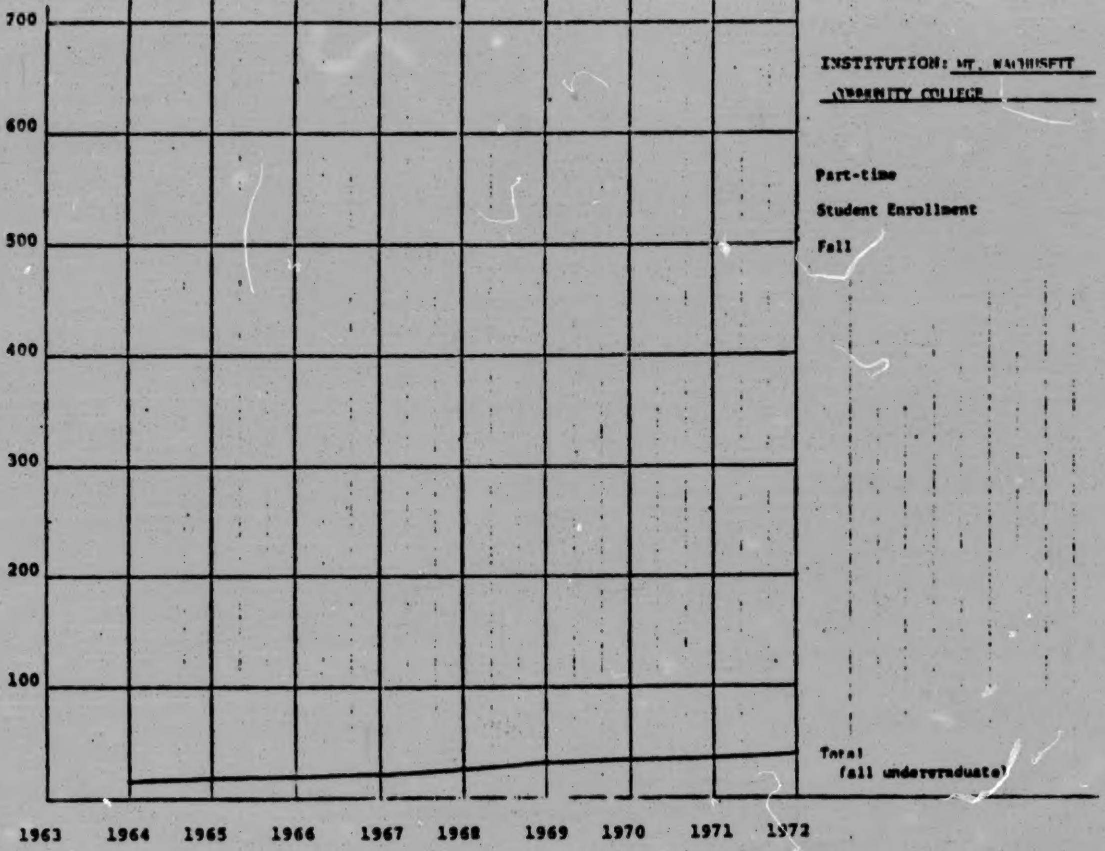
INSTITUTION: MT. WACHUSETT COMMUNITY COLLEGE

Continuing Education

Student Enrollment

Total

N.B. 1970 and 1971 figures include summer enrollments

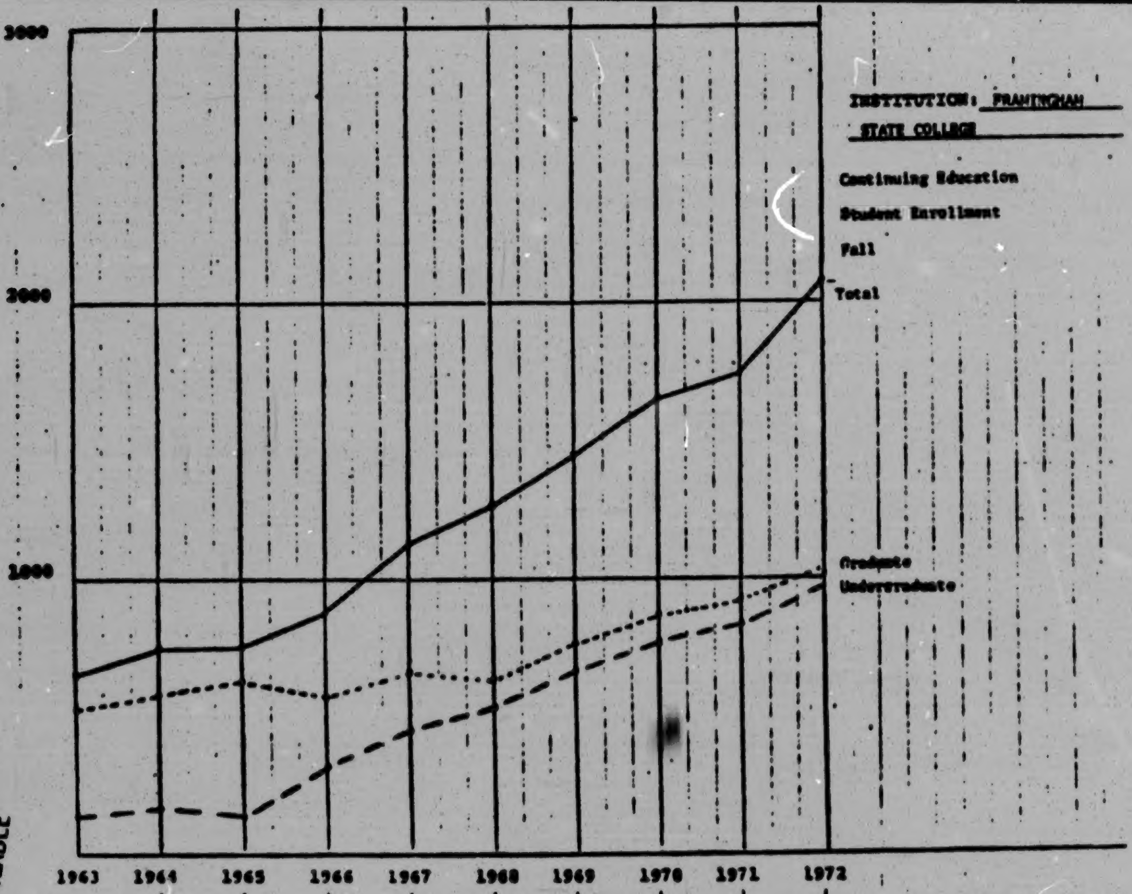


BEST COPY AVAILABLE

FRAMINGHAM AREA

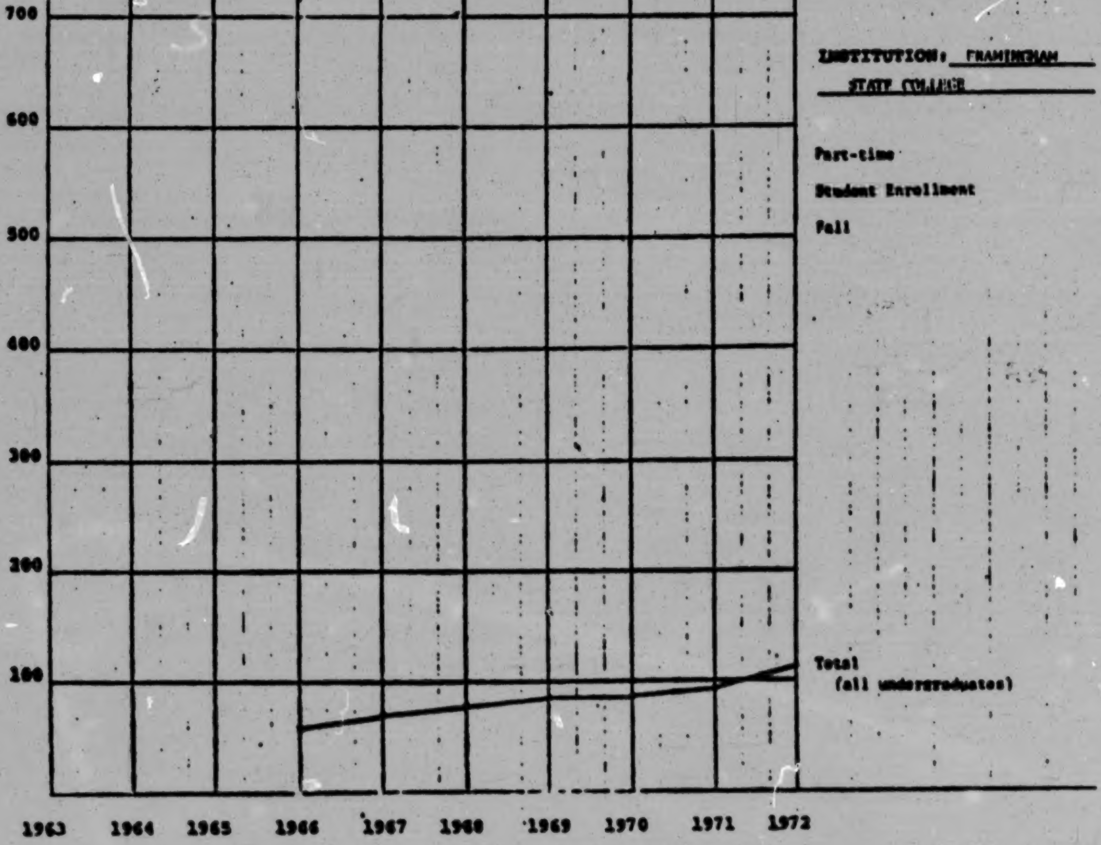
(Central Region)

BEST COPY AVAILABLE



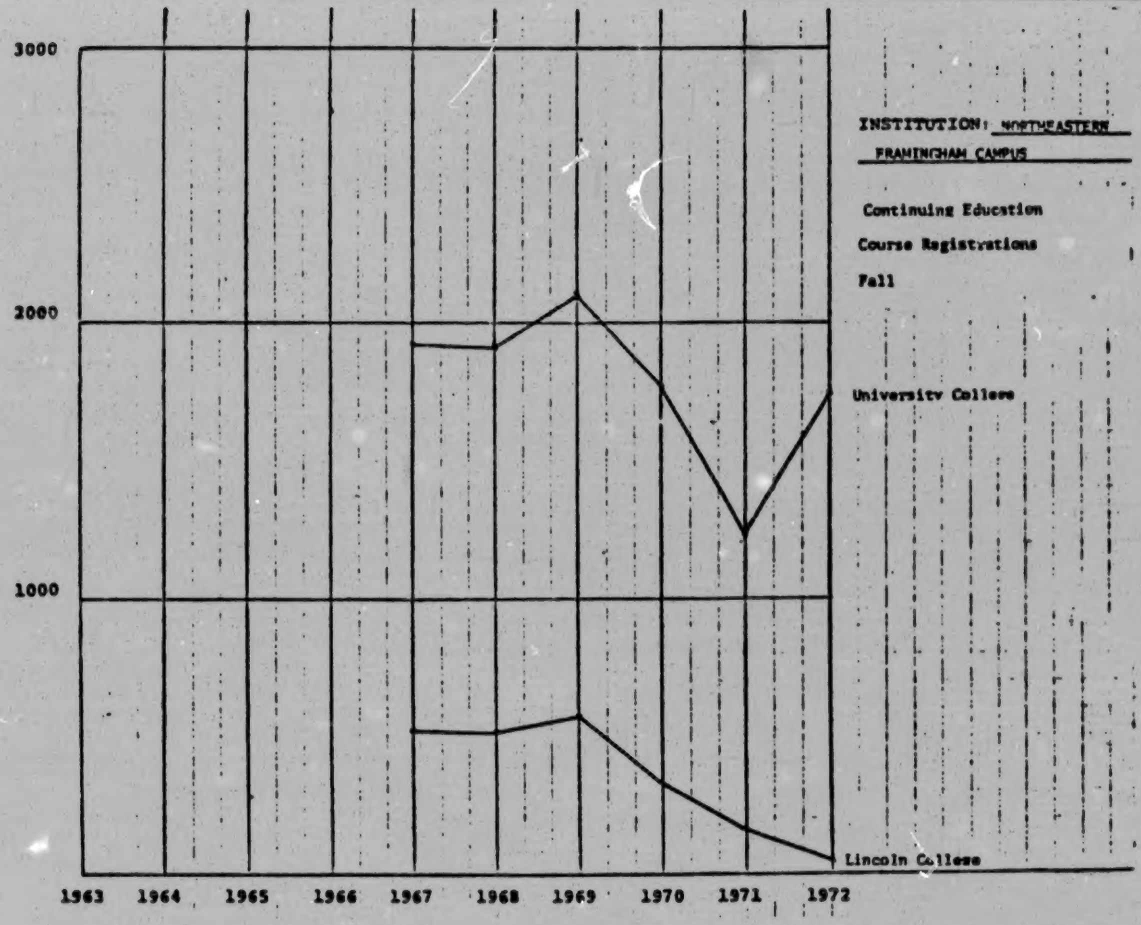
INSTITUTION: FRAMINGHAM STATE COLLEGE

Continuing Education
Student Enrollment
Fall



INSTITUTION: FRAMINGHAM STATE COLLEGE

Part-time
Student Enrollment
Fall



INSTITUTION: NORTHEASTERN FRAMINGHAM CAMPUS

Continuing Education

Course Registrations

Fall

BEST COPY AVAILABLE

LYNN/SALEM AREA

(Northeast Region)

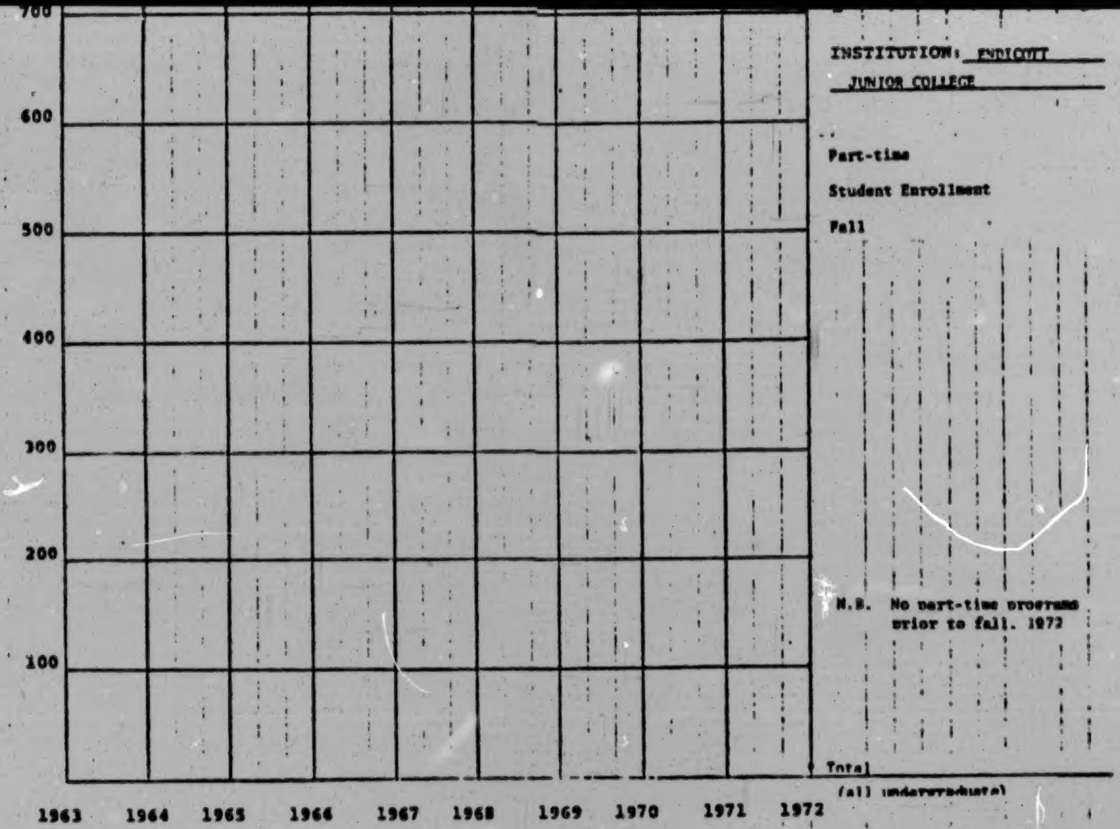
INSTITUTION: ENDICOTT JUNIOR COLLEGE

Part-time

Student Enrollment

Fall

N.B. No part-time programs prior to fall, 1972



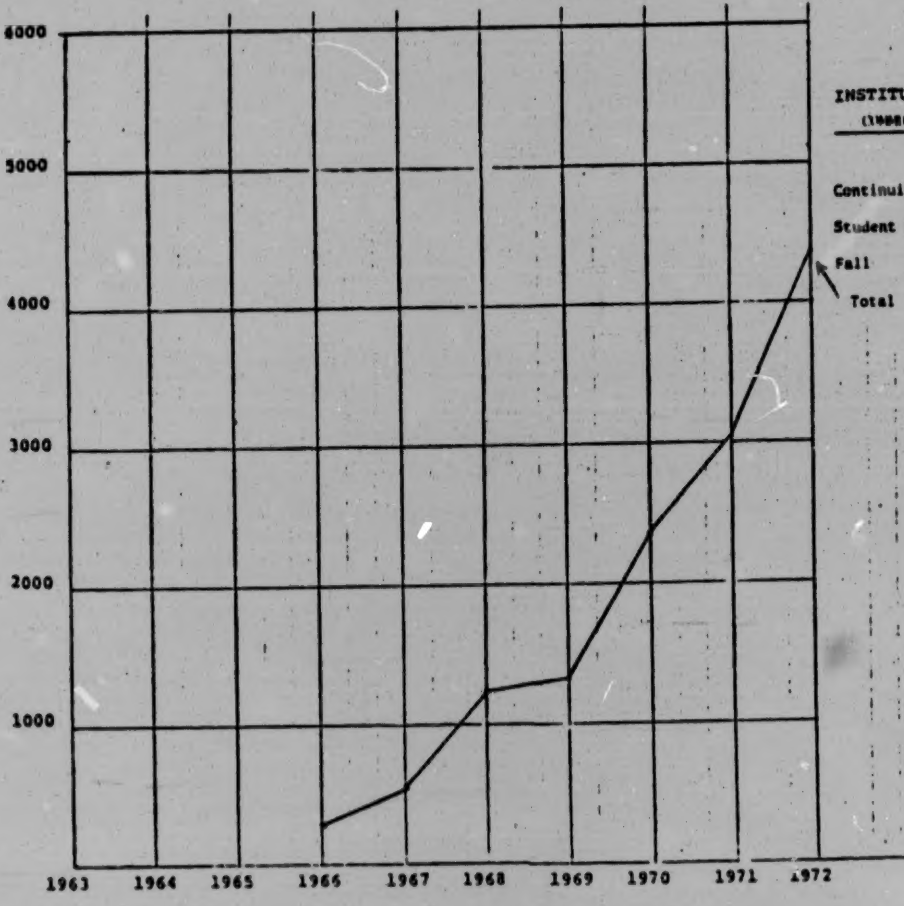
BEST COPY AVAILABLE

INSTITUTION: NORTH SHORE COMMUNITY COLLEGE

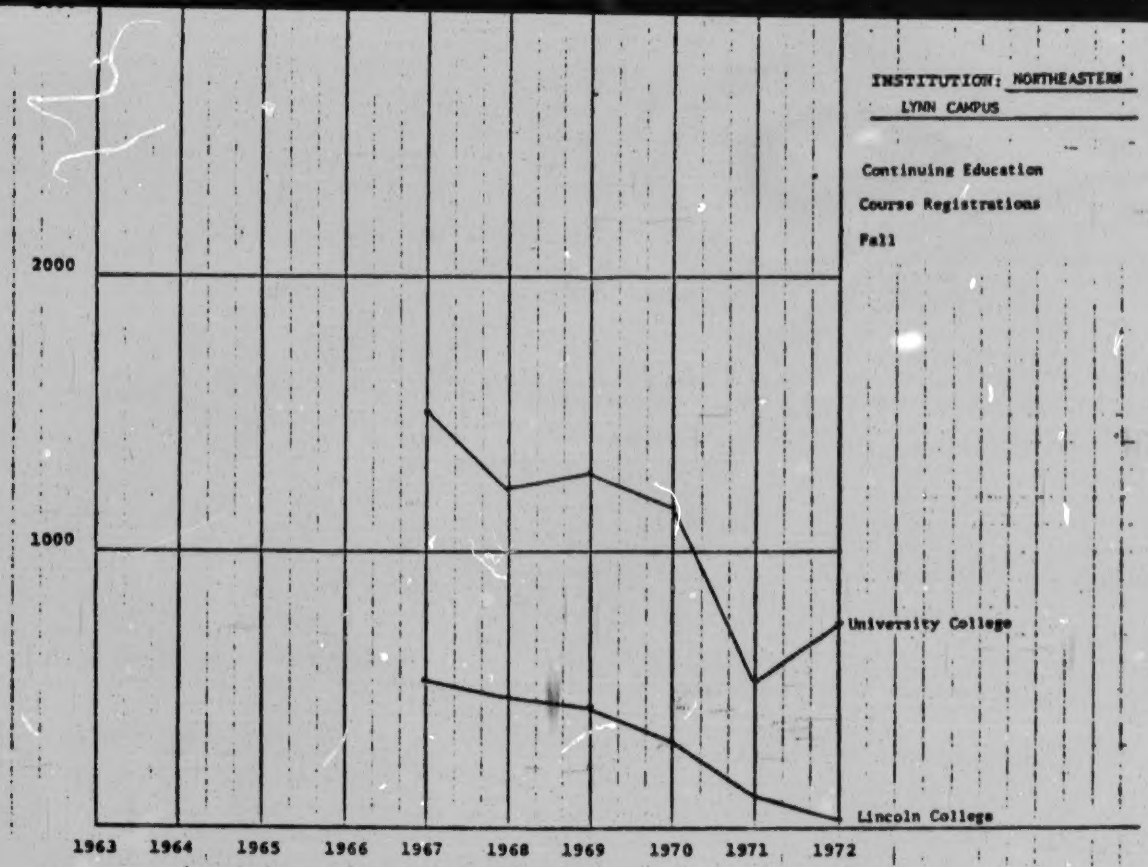
Continuing Education

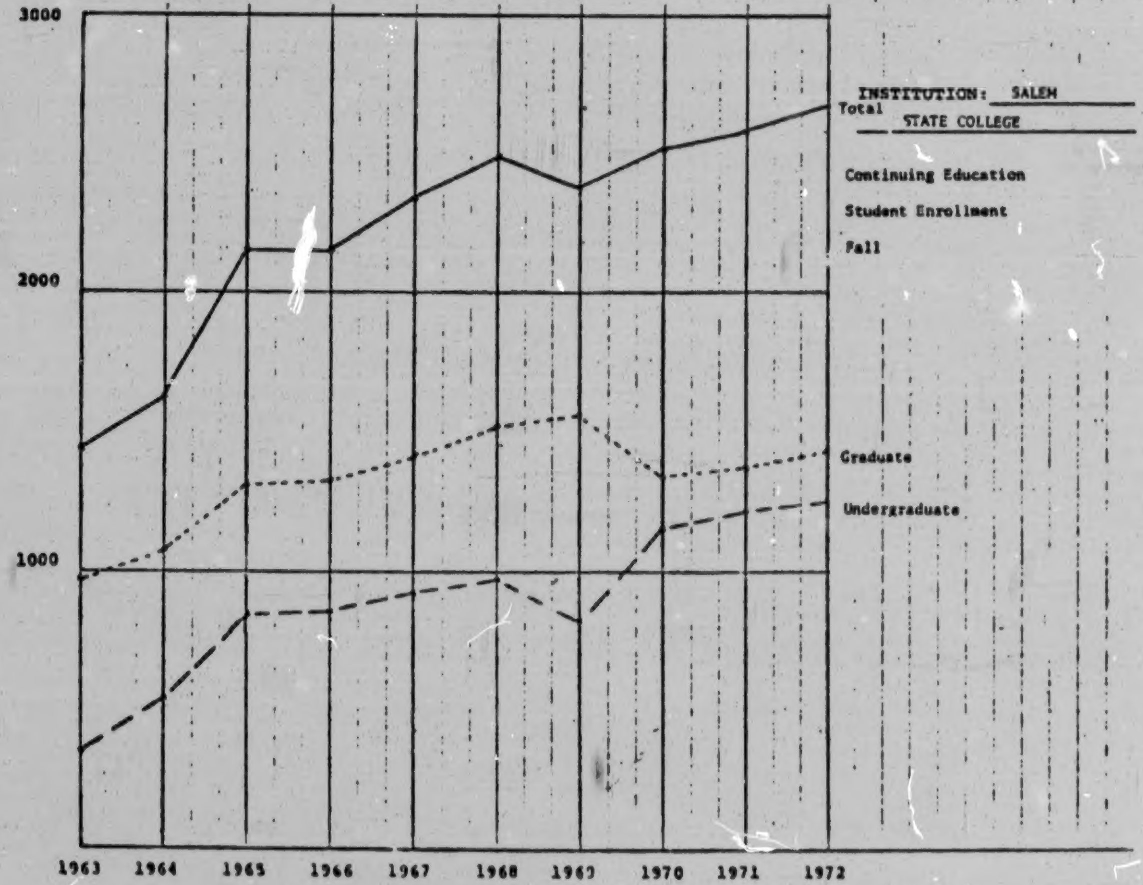
Student Enrollment

Fall



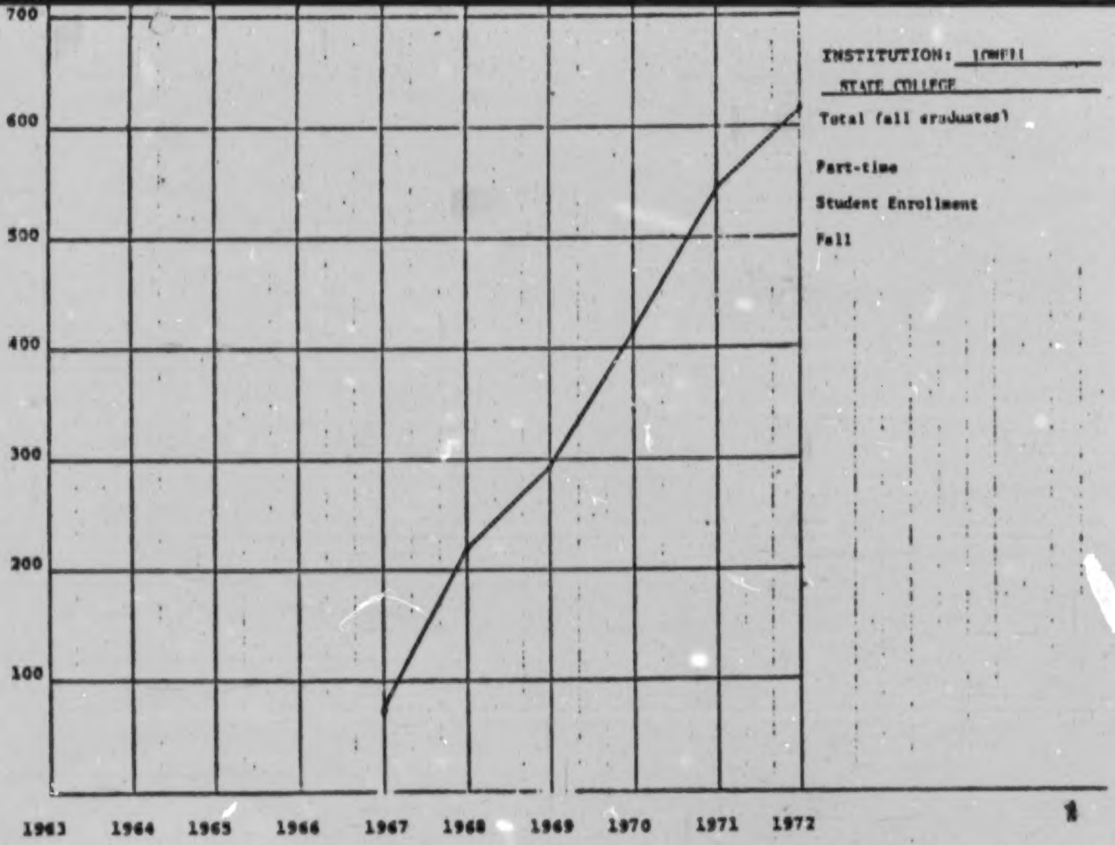
BEST COPY AVAILABLE



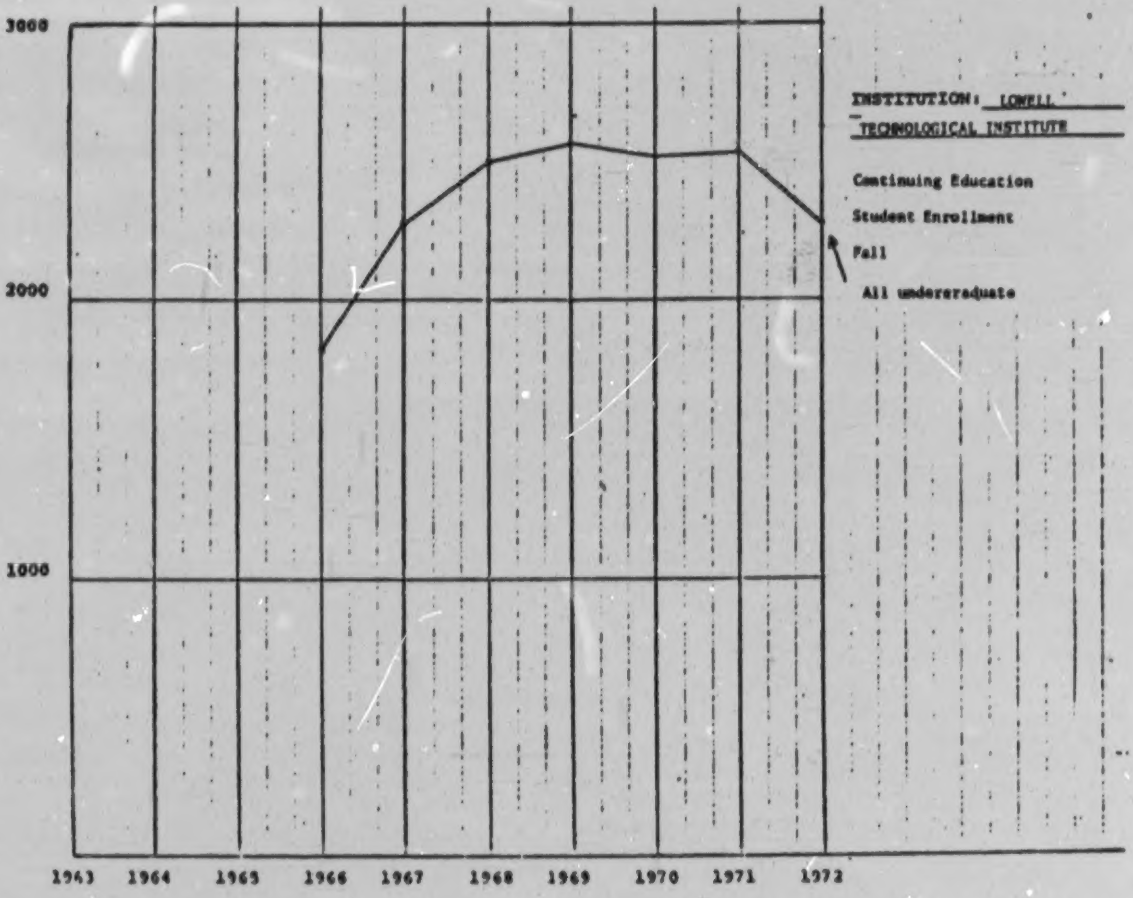


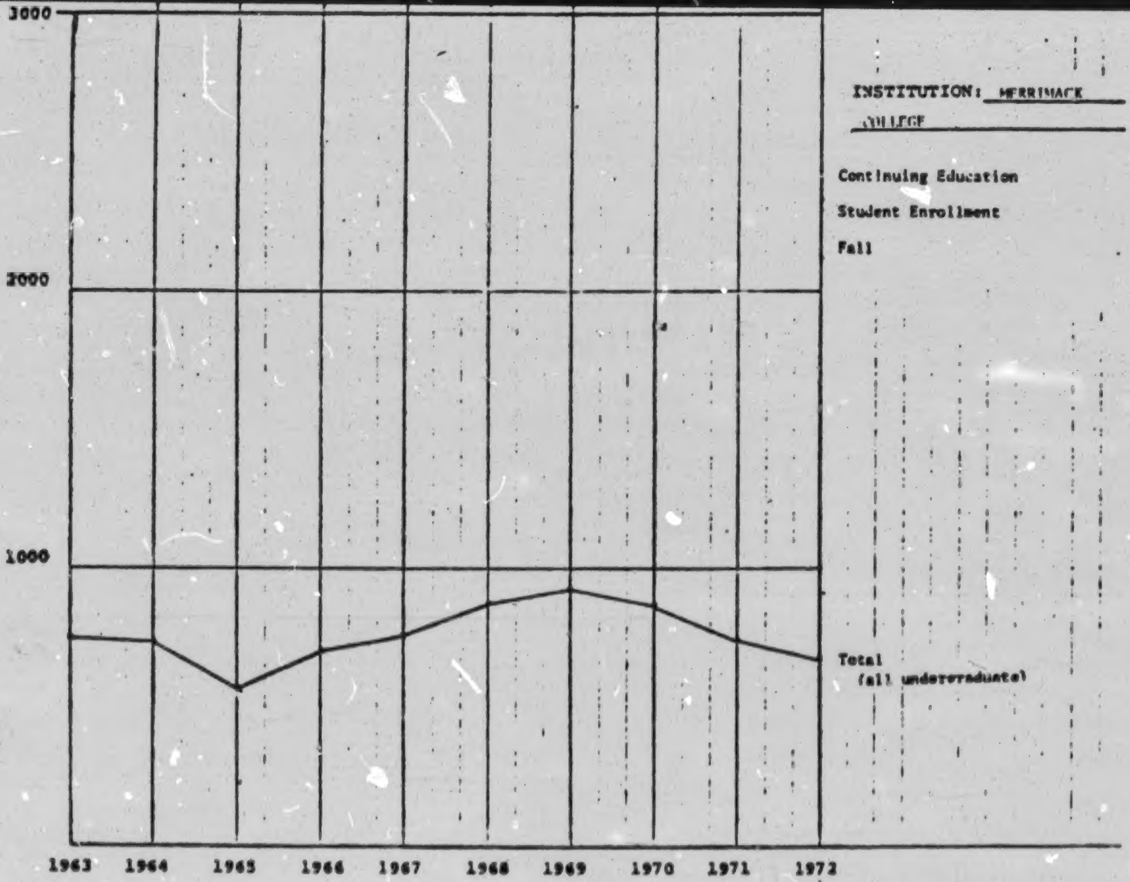
ANDOVER/LOWELL AREA

(Northeast Region)



BEST COPY AVAILABLE





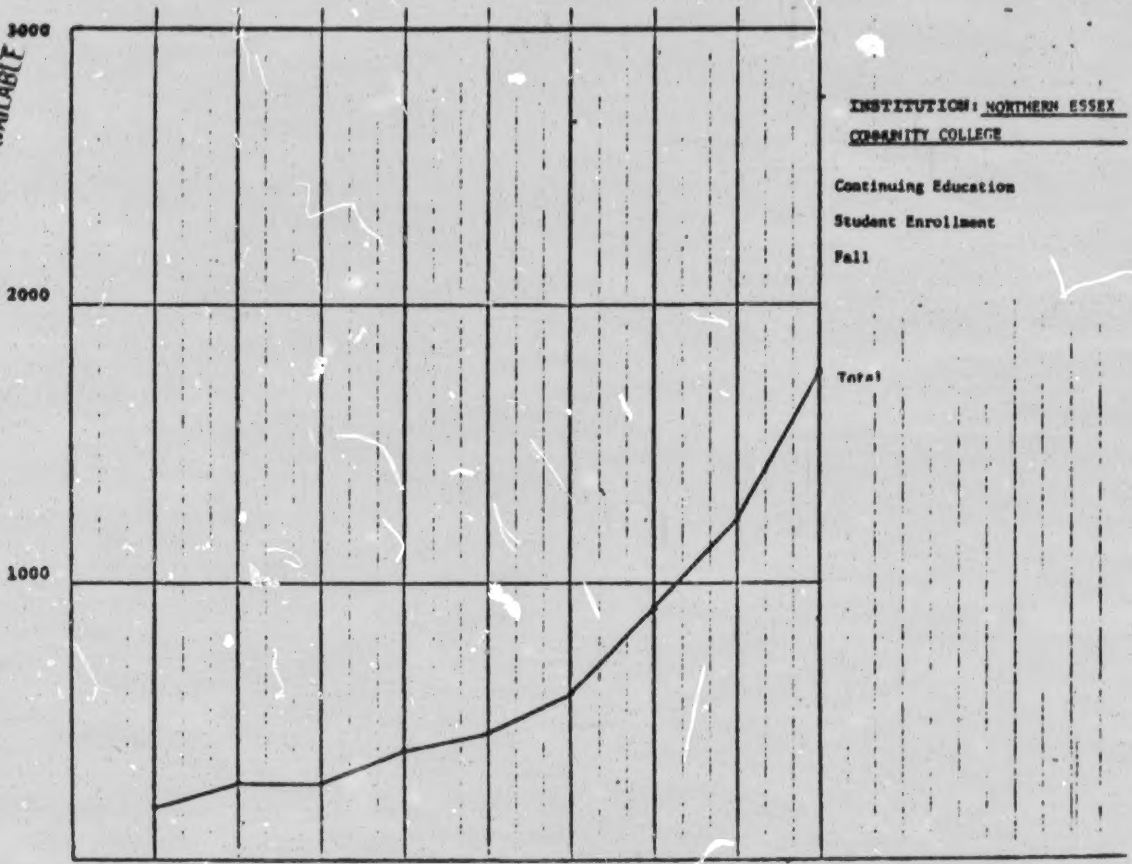
INSTITUTION: MERRIMACK COLLEGE

Continuing Education

Student Enrollment

Fall

BEST COPY AVAILABLE



INSTITUTION: NORTHERN ESSEX COMMUNITY COLLEGE

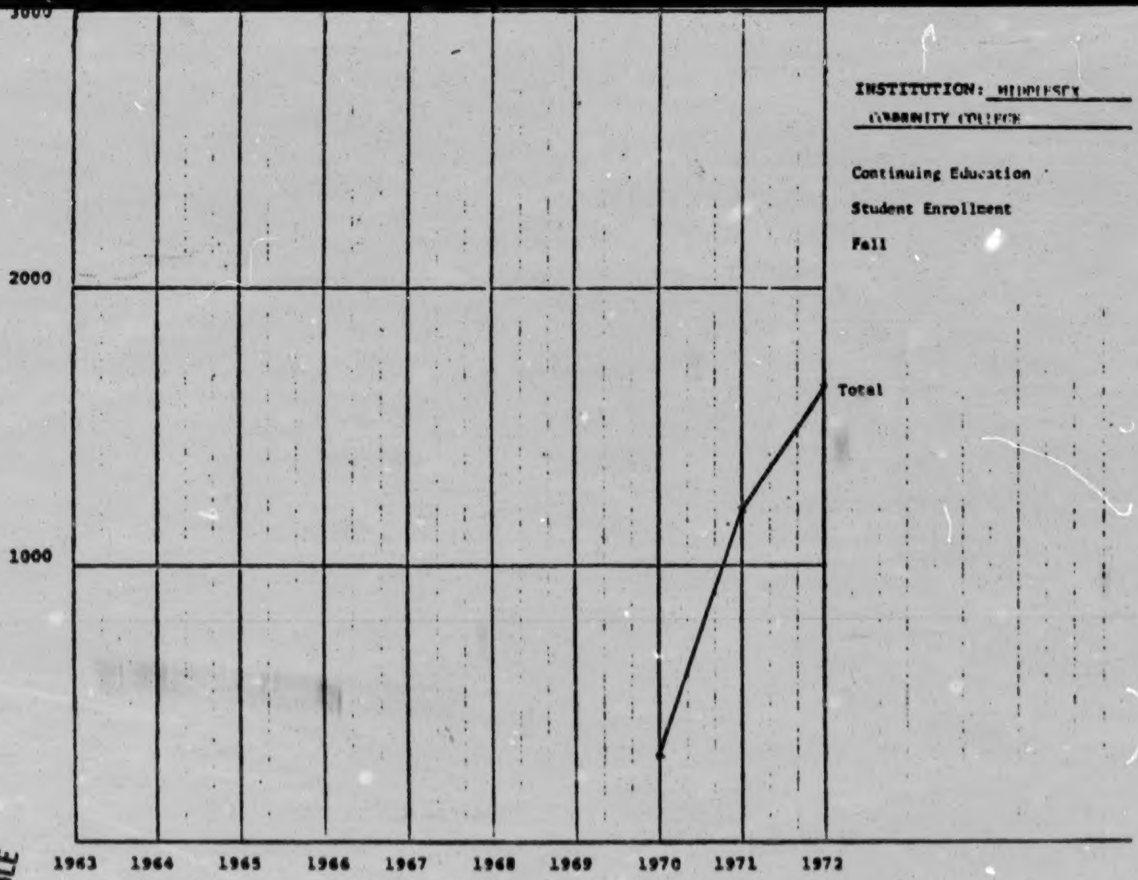
Continuing Education

Student Enrollment

Fall

BURLINGTON/BEDFORD AREA

(Northeast Region)



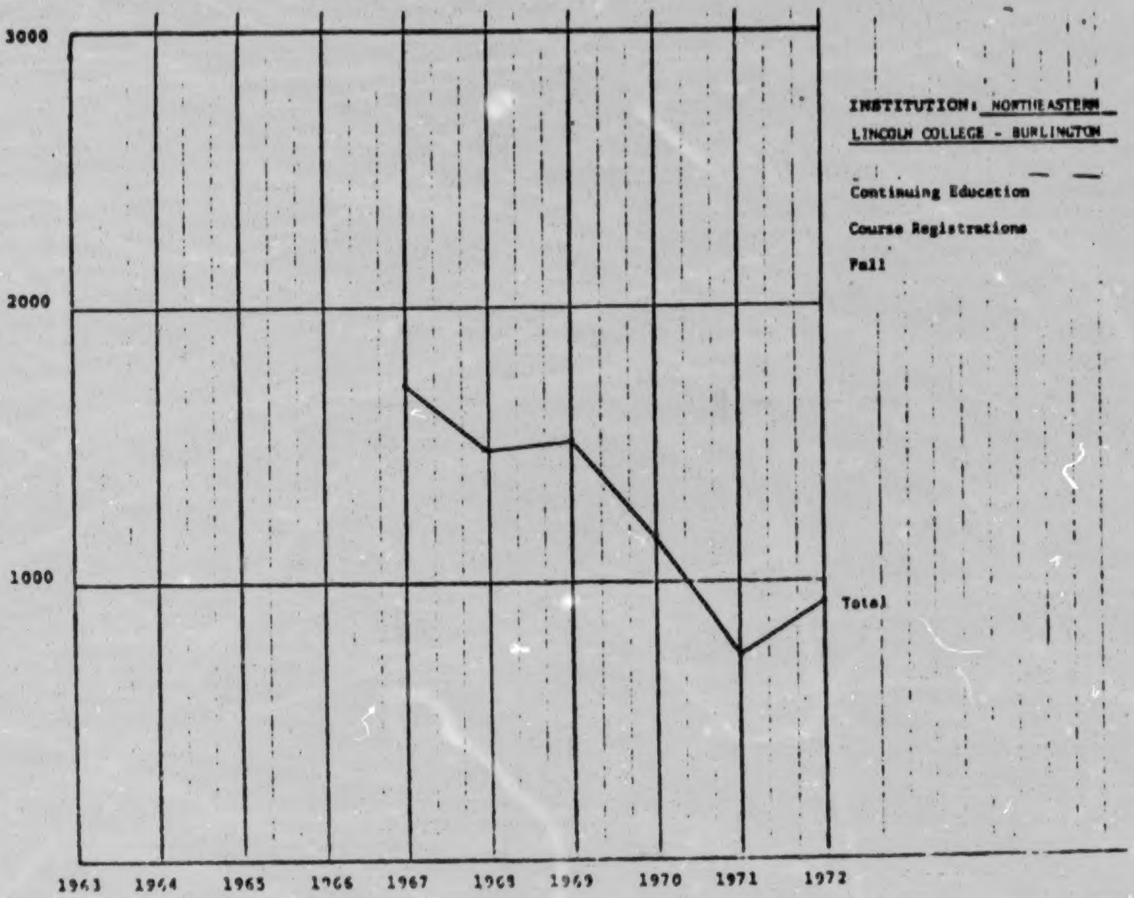
INSTITUTION: MIDDLESEX COMMUNITY COLLEGE

Continuing Education

Student Enrollment

Fall

BEST COPY AVAILABLE

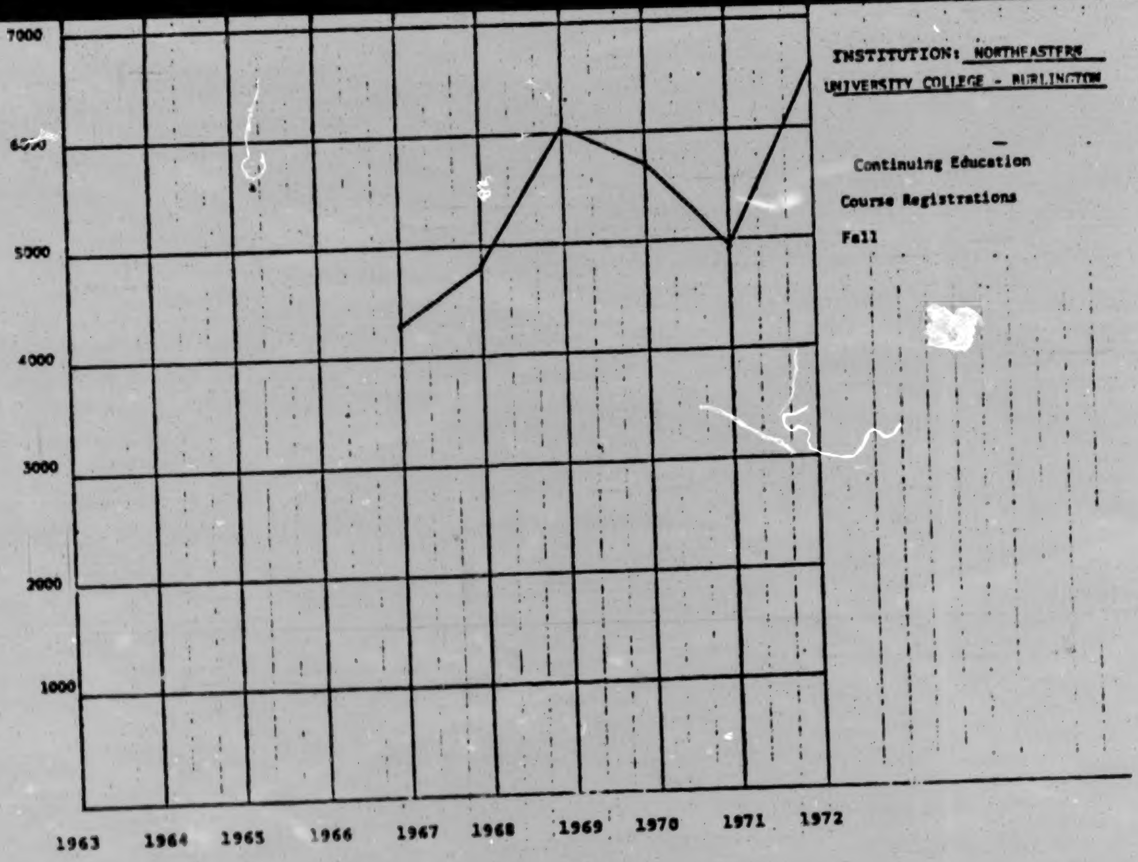


INSTITUTION: NORTHEASTERN LINCOLN COLLEGE - BURLINGTON

Continuing Education

Course Registrations

Fall


INSTITUTION: NORTHEASTERN UNIVERSITY COLLEGE - BURLINGTON

Continuing Education

Course Registrations

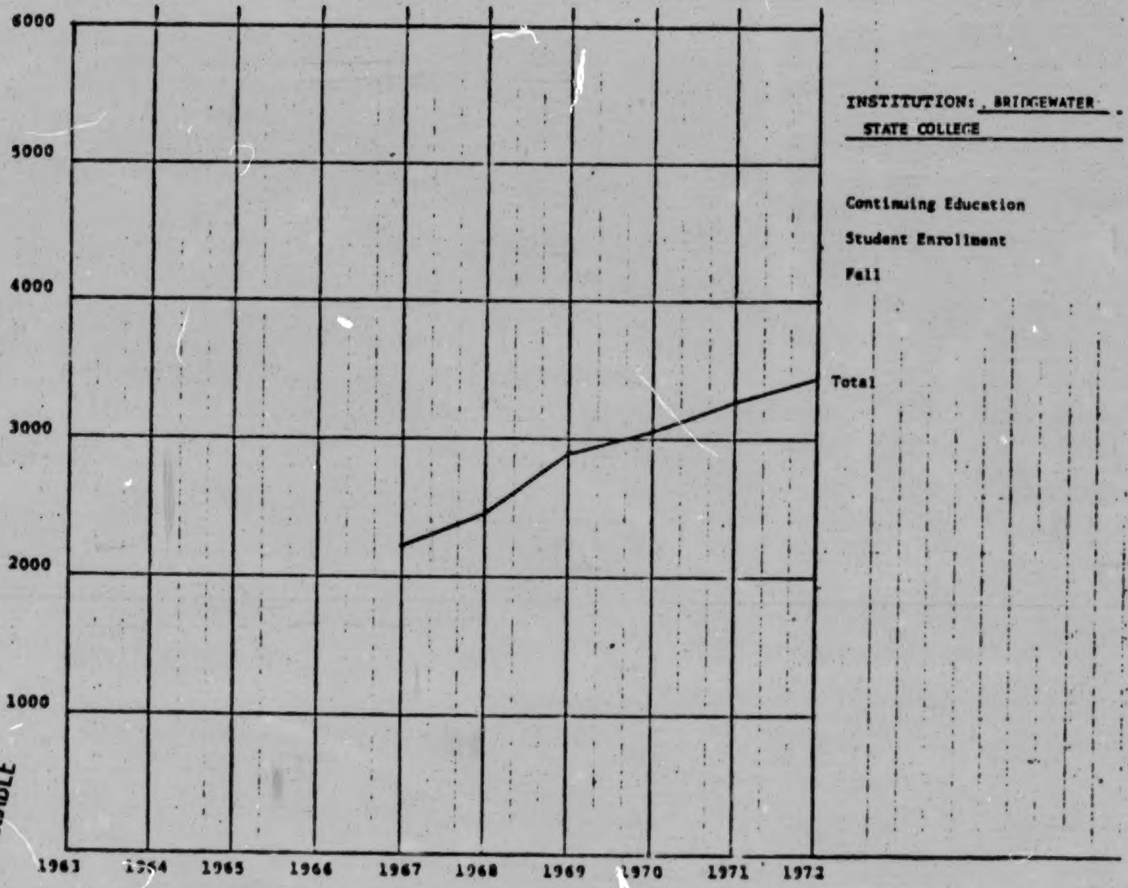
Fall

BEST COPY AVAILABLE

BROCKTON AREA

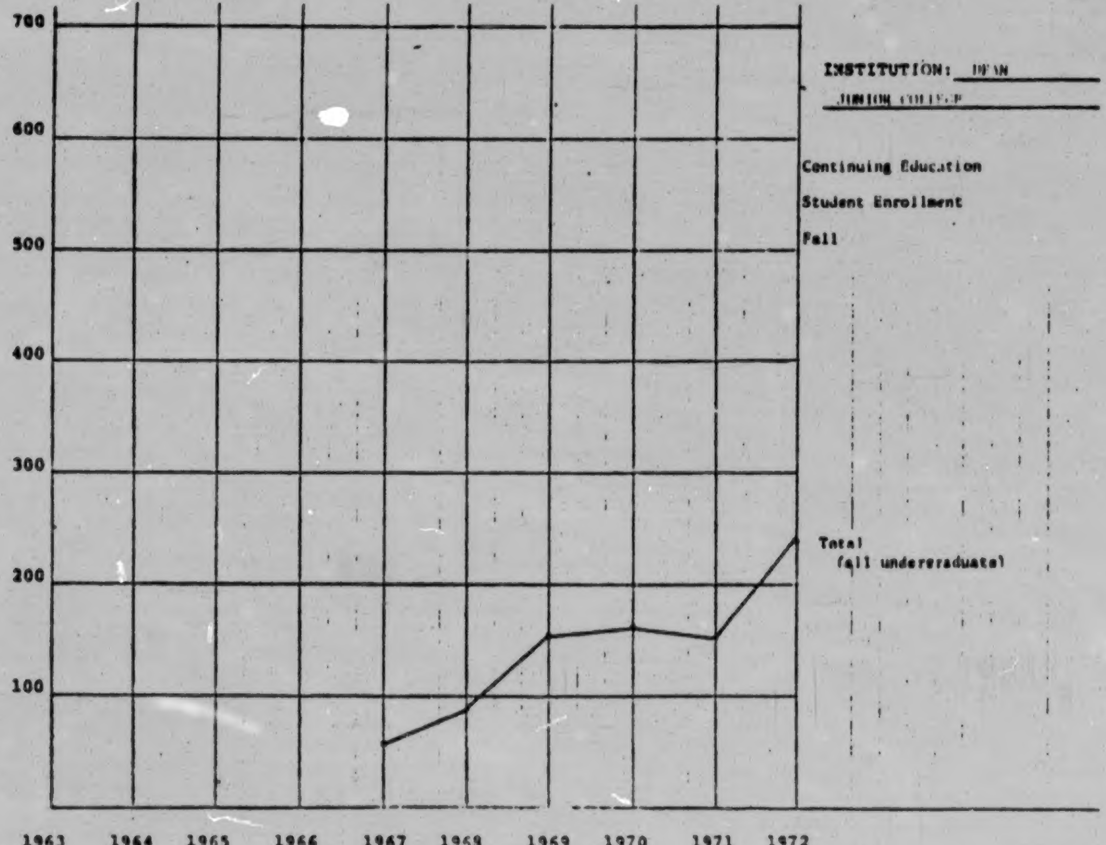
(Southeast Region)

BEST COPY AVAILABLE



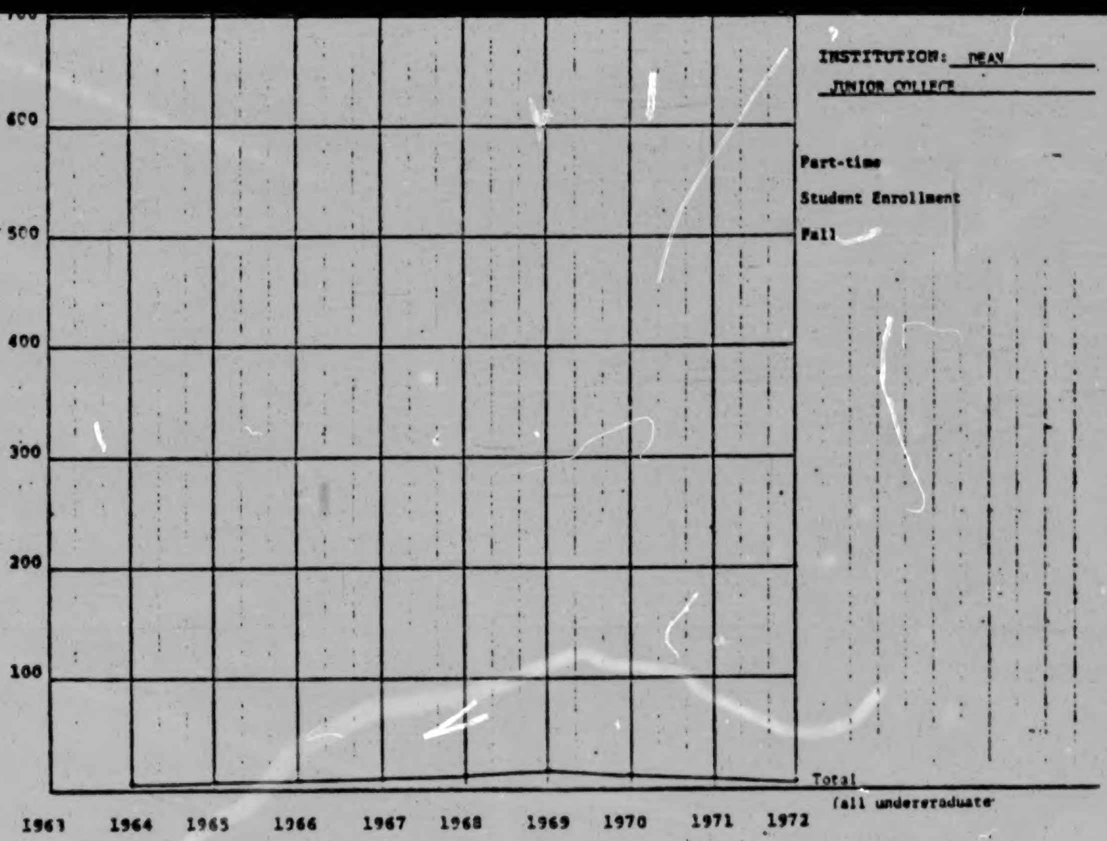
INSTITUTION: BRIDGEWATER
STATE COLLEGE

Continuing Education
Student Enrollment
Fall



INSTITUTION: DEAN
JUNIOR COLLEGE

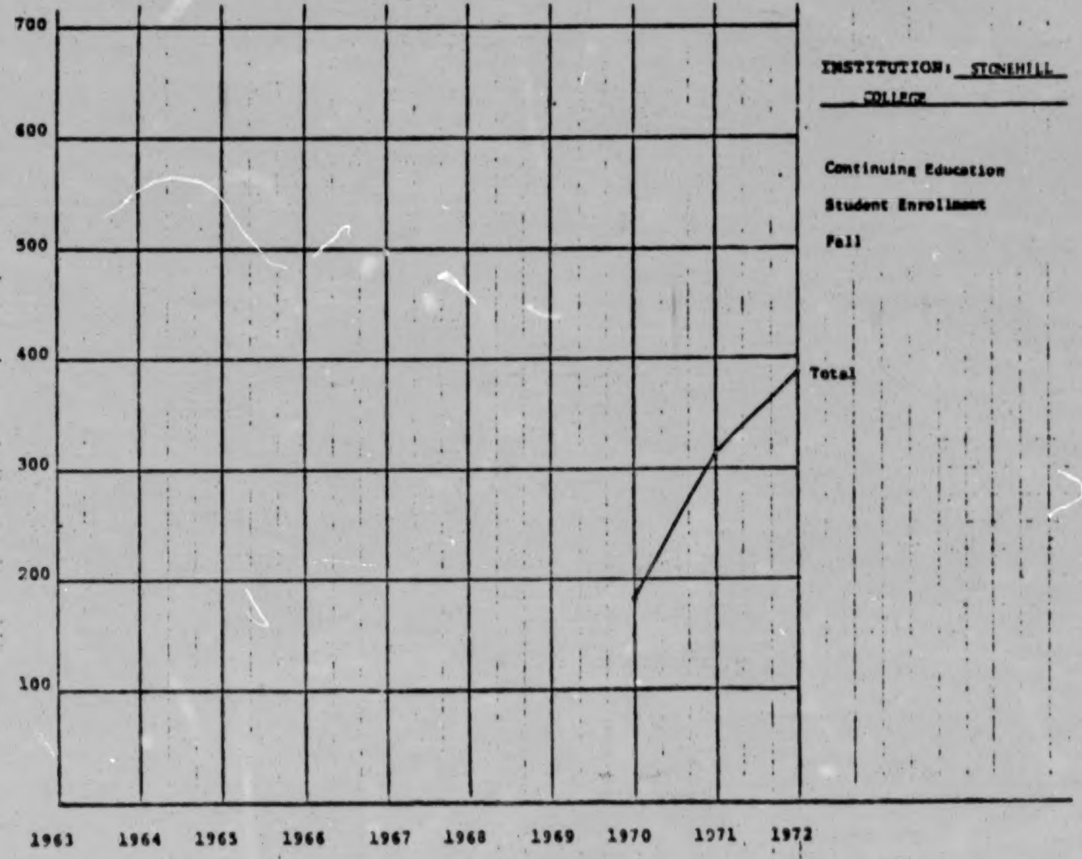
Continuing Education
Student Enrollment
Fall



INSTITUTION: DEAN JUNIOR COLLEGE

Part-time Student Enrollment Fall

BEST COPY AVAILABLE



INSTITUTION: STONEHILL COLLEGE

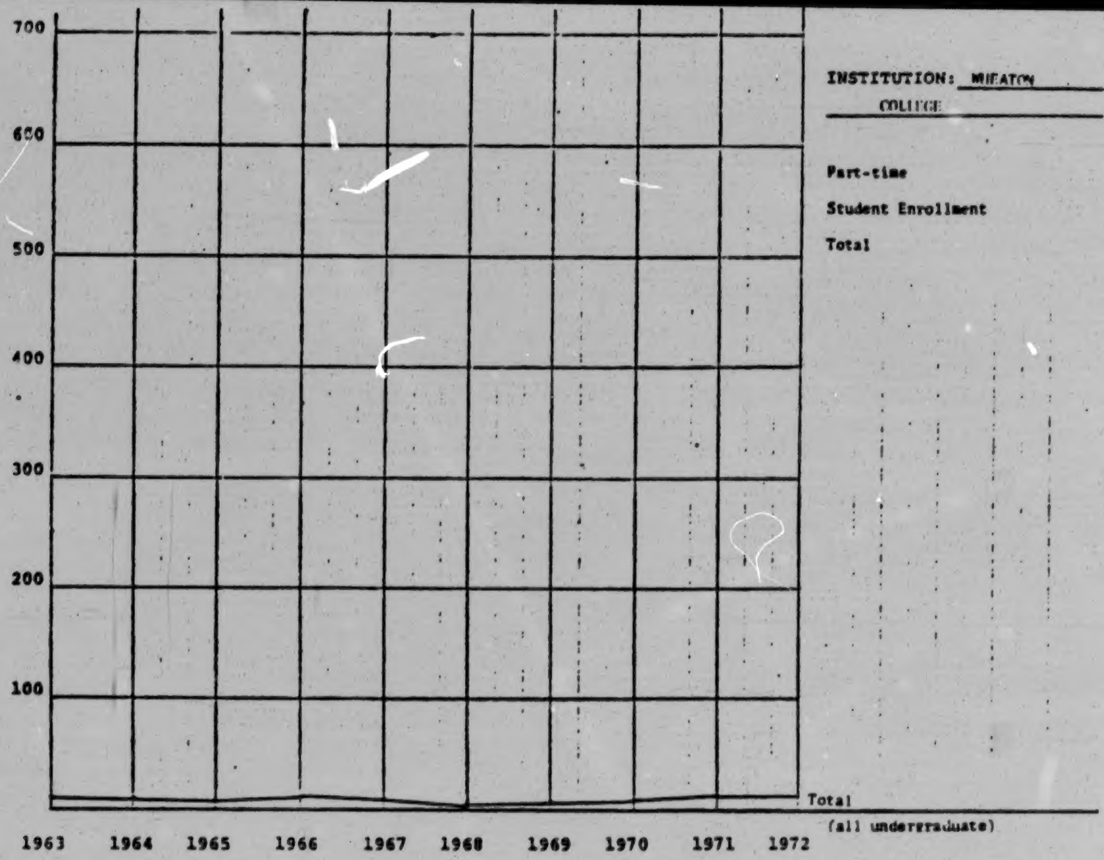
Continuing Education Student Enrollment Fall

INSTITUTION: WHEATON COLLEGE

Part-time

Student Enrollment

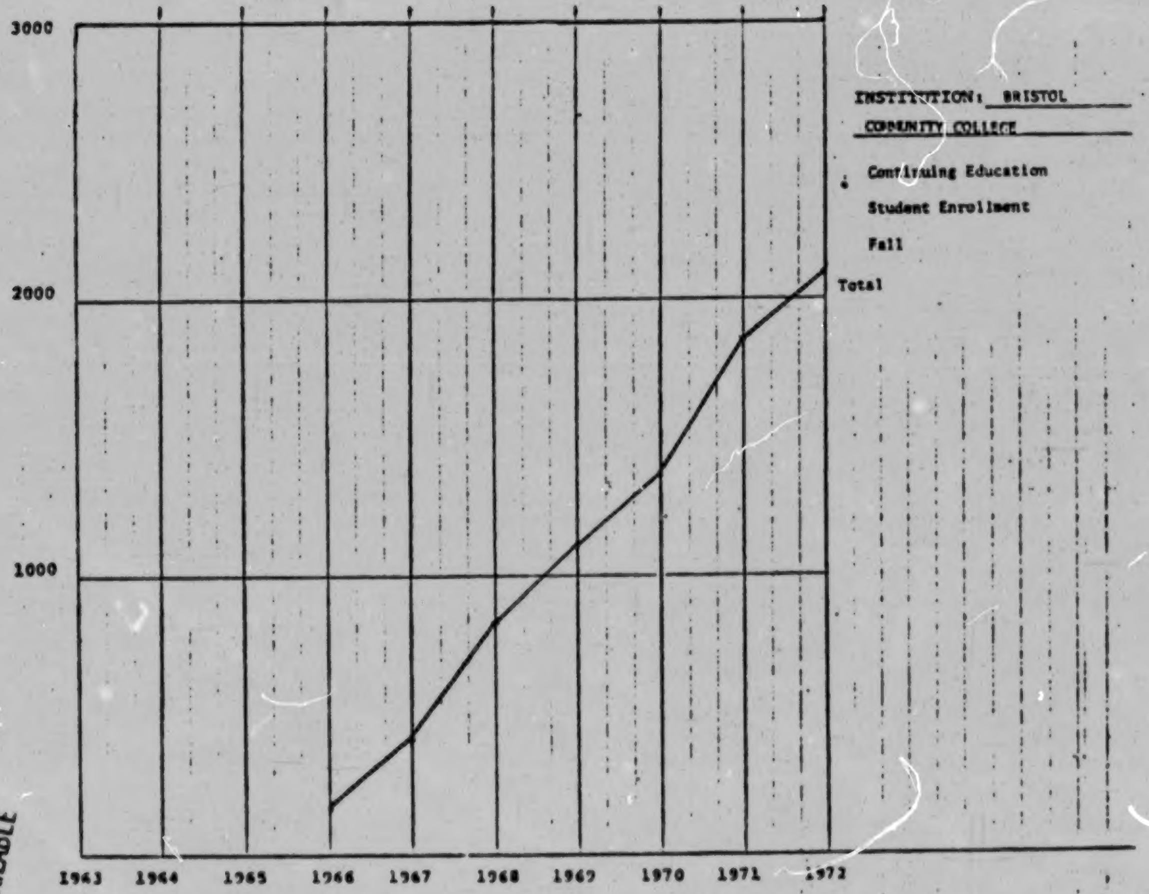
Total



BEST COPY AVAILABLE

FALL RIVER/NEW BEDFORD AREA

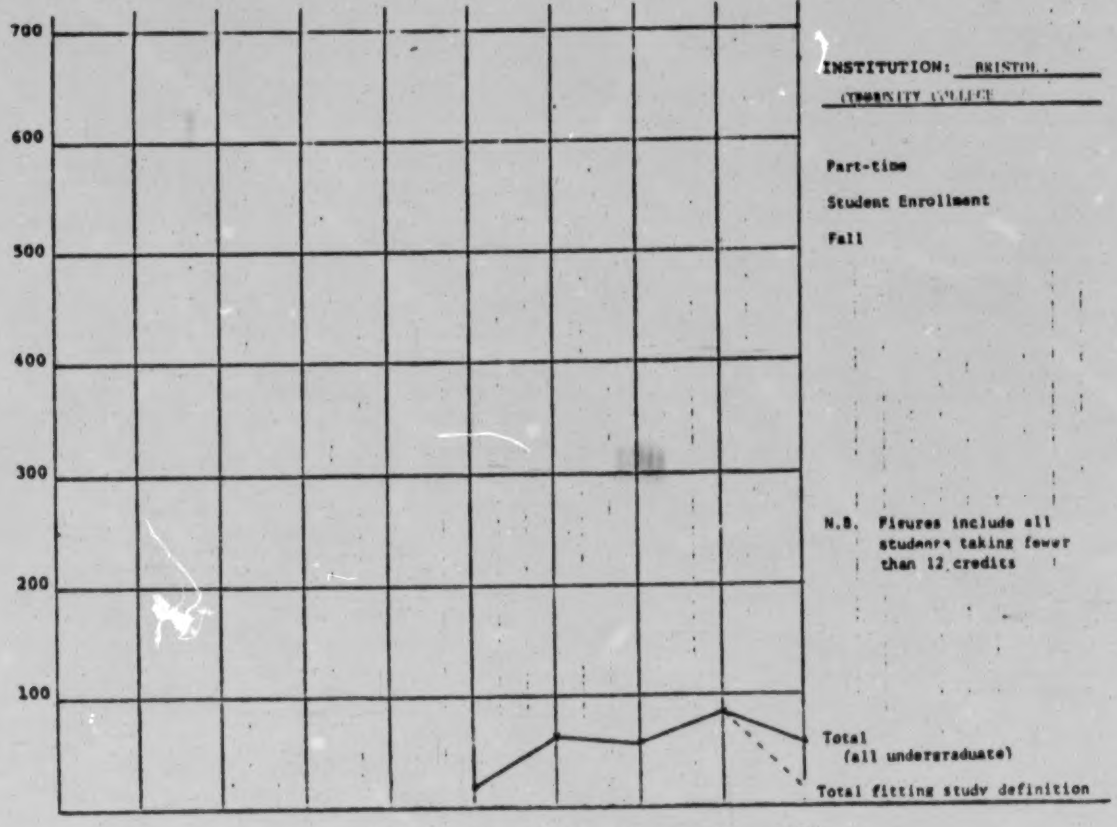
(Southeast Region)



INSTITUTION: BRISTOL COMMUNITY COLLEGE

Continuing Education
Student Enrollment
Fall

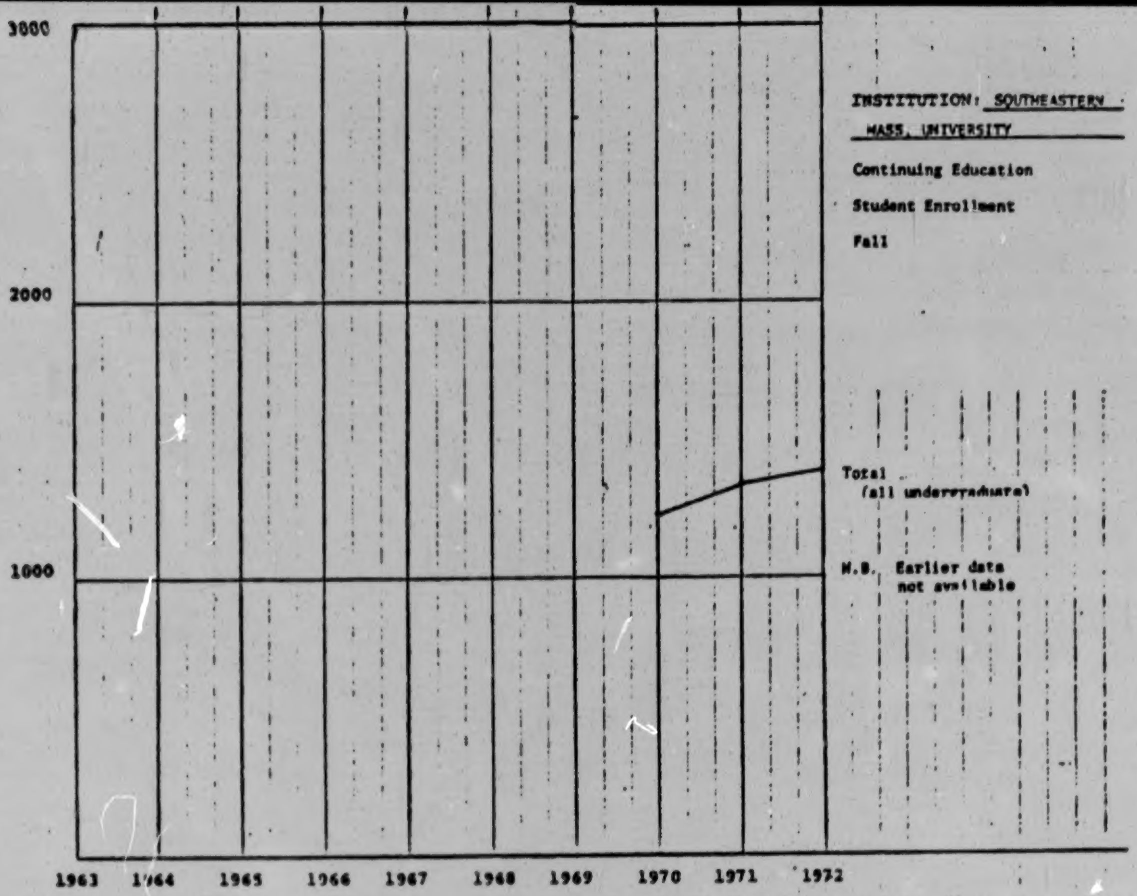
BEST COPY AVAILABLE



INSTITUTION: BRISTOL COMMUNITY COLLEGE

Part-time
Student Enrollment
Fall

N.B. Figures include all students taking fewer than 12 credits



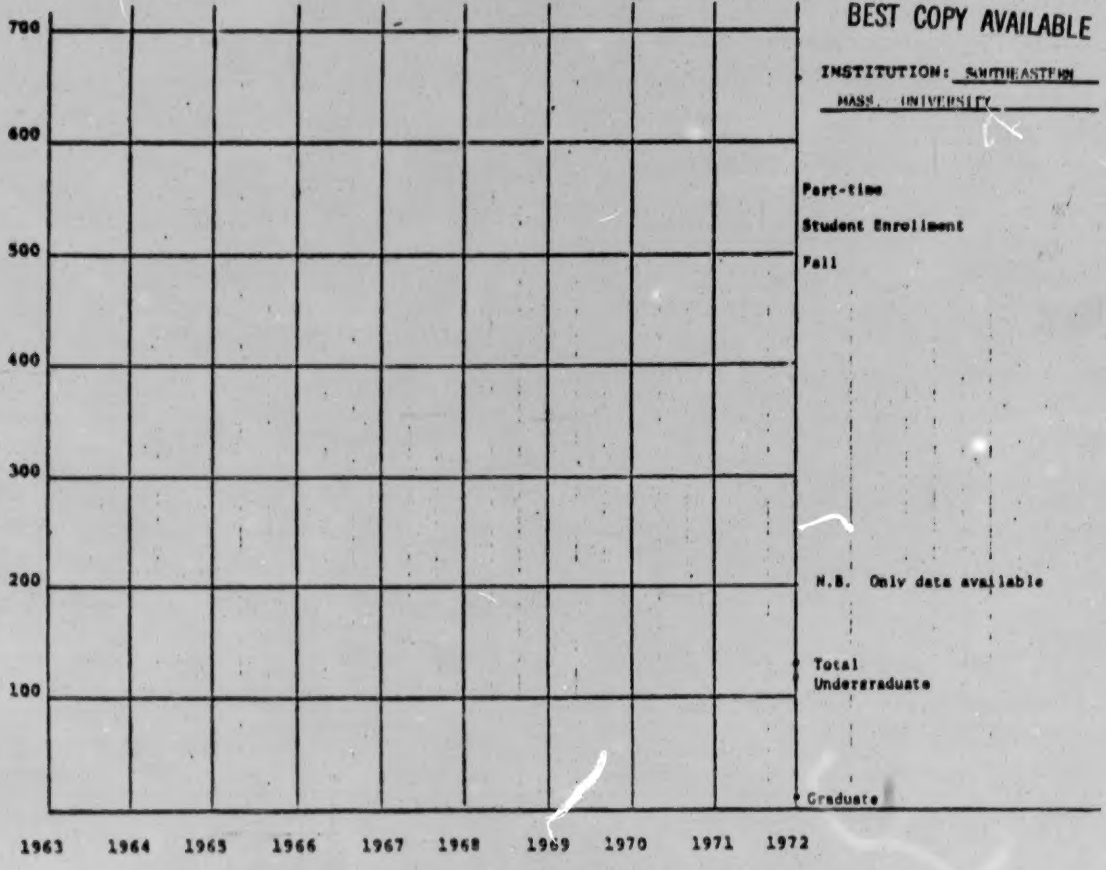
INSTITUTION: SOUTHEASTERN MASS. UNIVERSITY

Continuing Education

Student Enrollment

Fall

BEST COPY AVAILABLE



INSTITUTION: SOUTHEASTERN MASS. UNIVERSITY

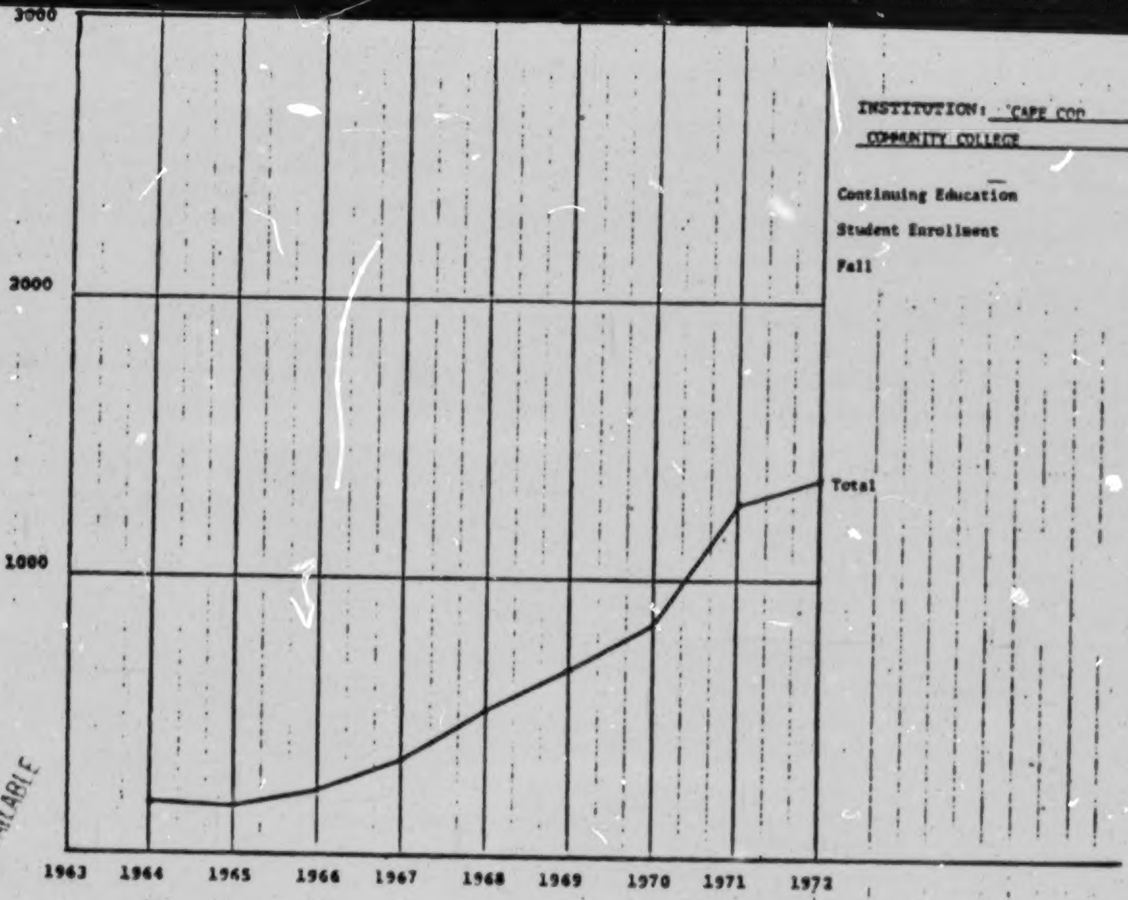
Part-time

Student Enrollment

Fall

FALMOUTH/BARNSTABLE AREA

(Southeast Region)



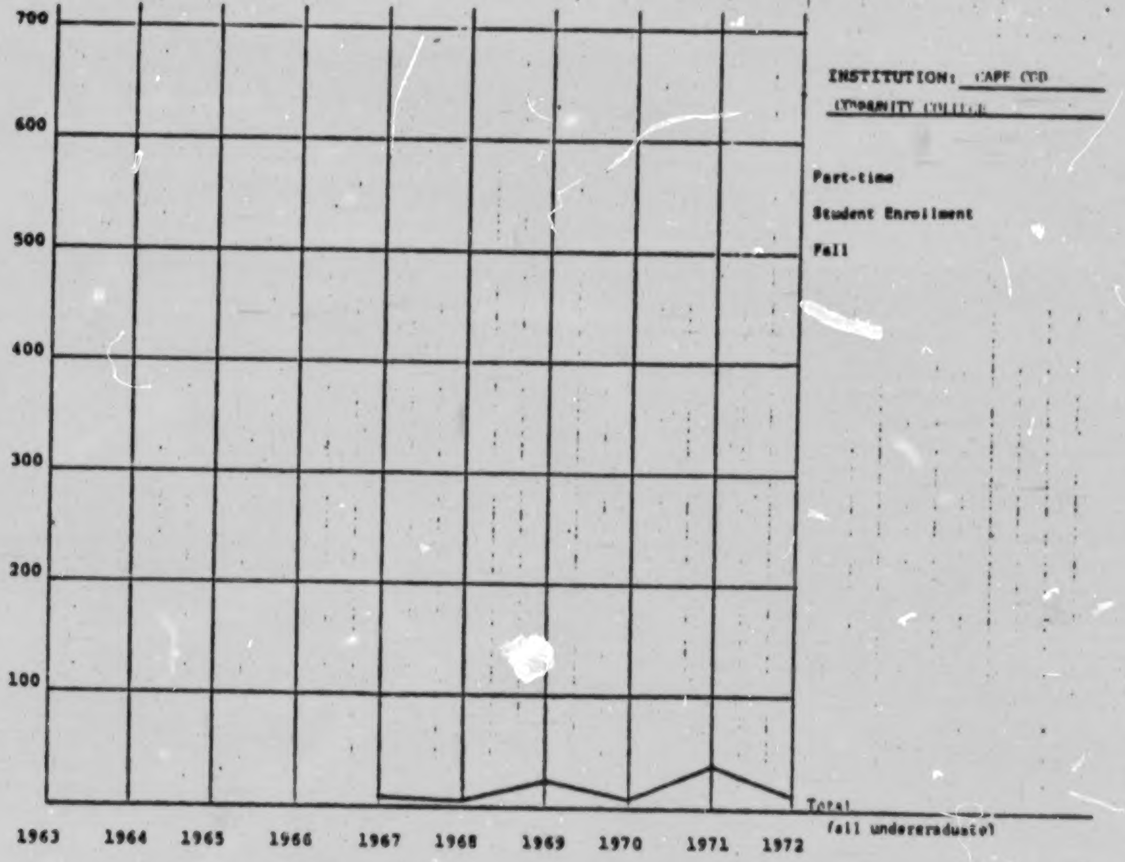
INSTITUTION: CAPE COD COMMUNITY COLLEGE

Continuing Education

Student Enrollment

Fall

BEST COPY AVAILABLE



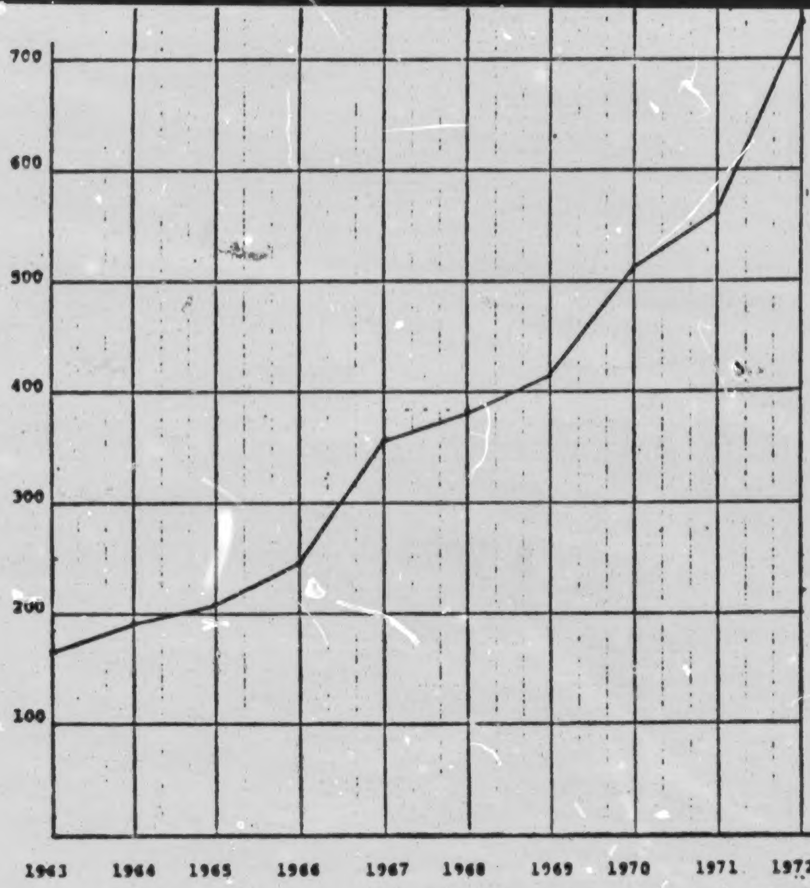
INSTITUTION: CAPE COD COMMUNITY COLLEGE

Part-time

Student Enrollment

Fall

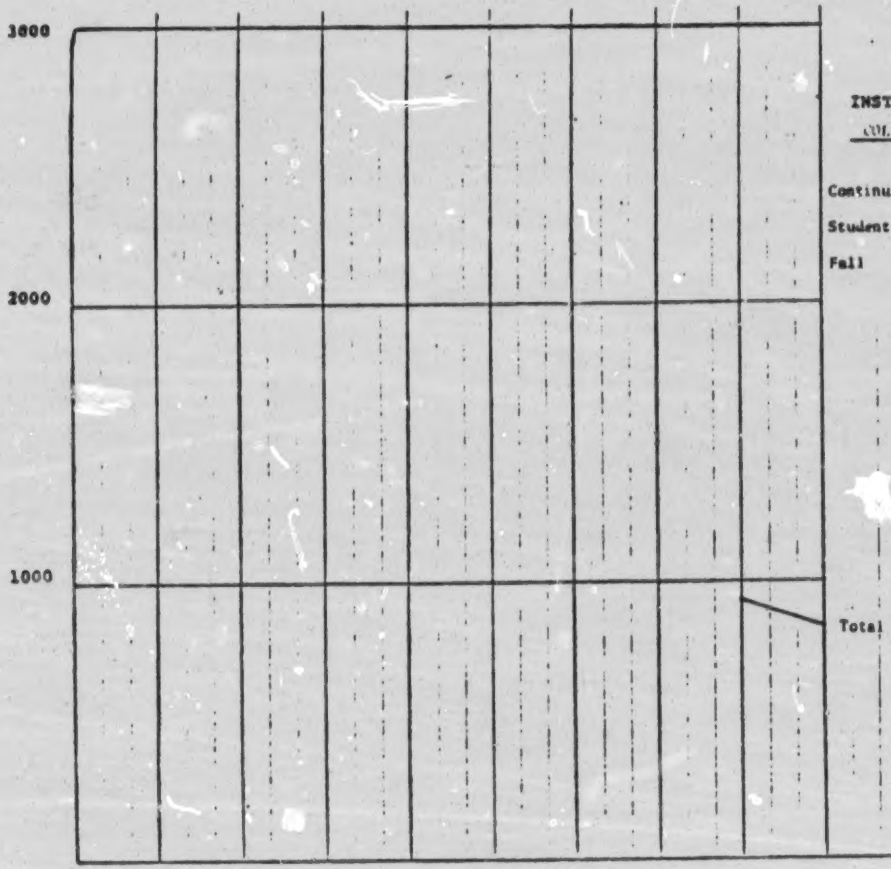
BOSTON AREA



INSTITUTION: BABSON
COLLEGE

Part-time
Student Enrollment
Fall

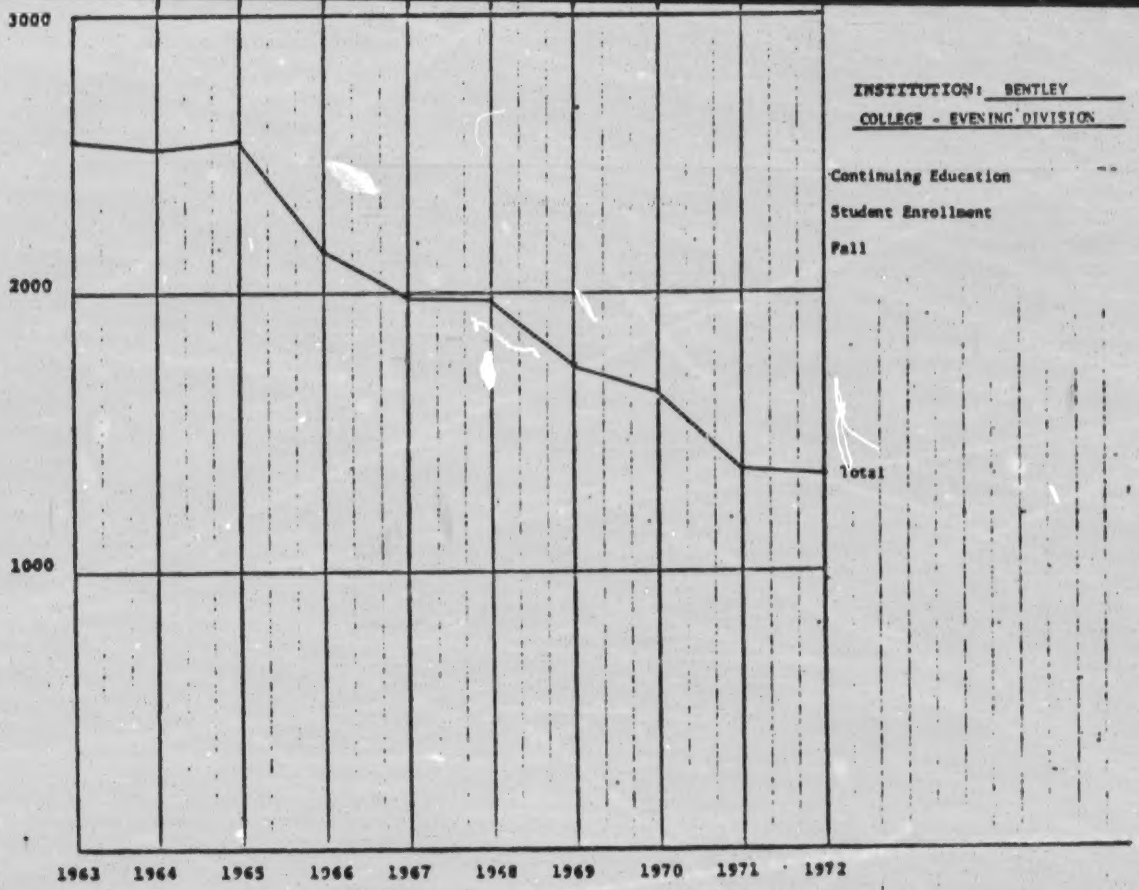
BEST COPY AVAILABLE

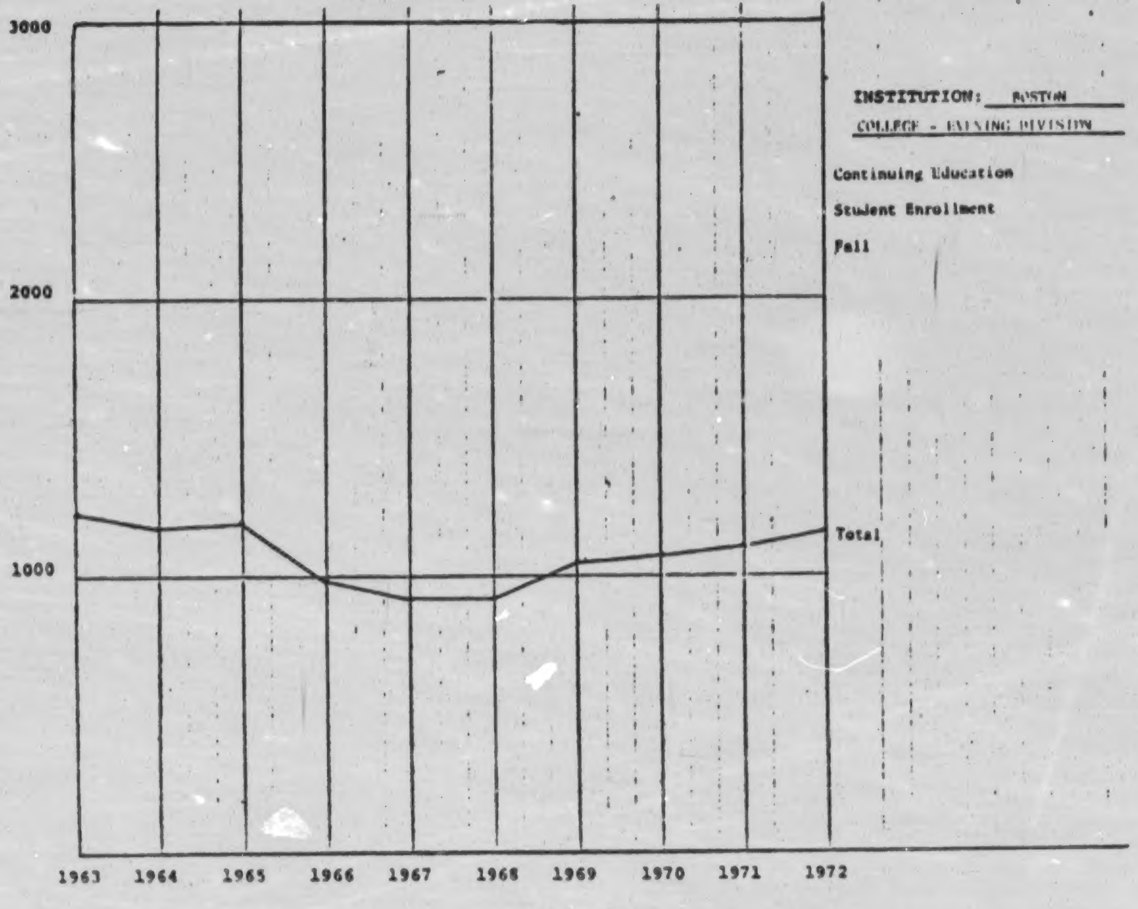


INSTITUTION: BENTLEY
COLLEGE

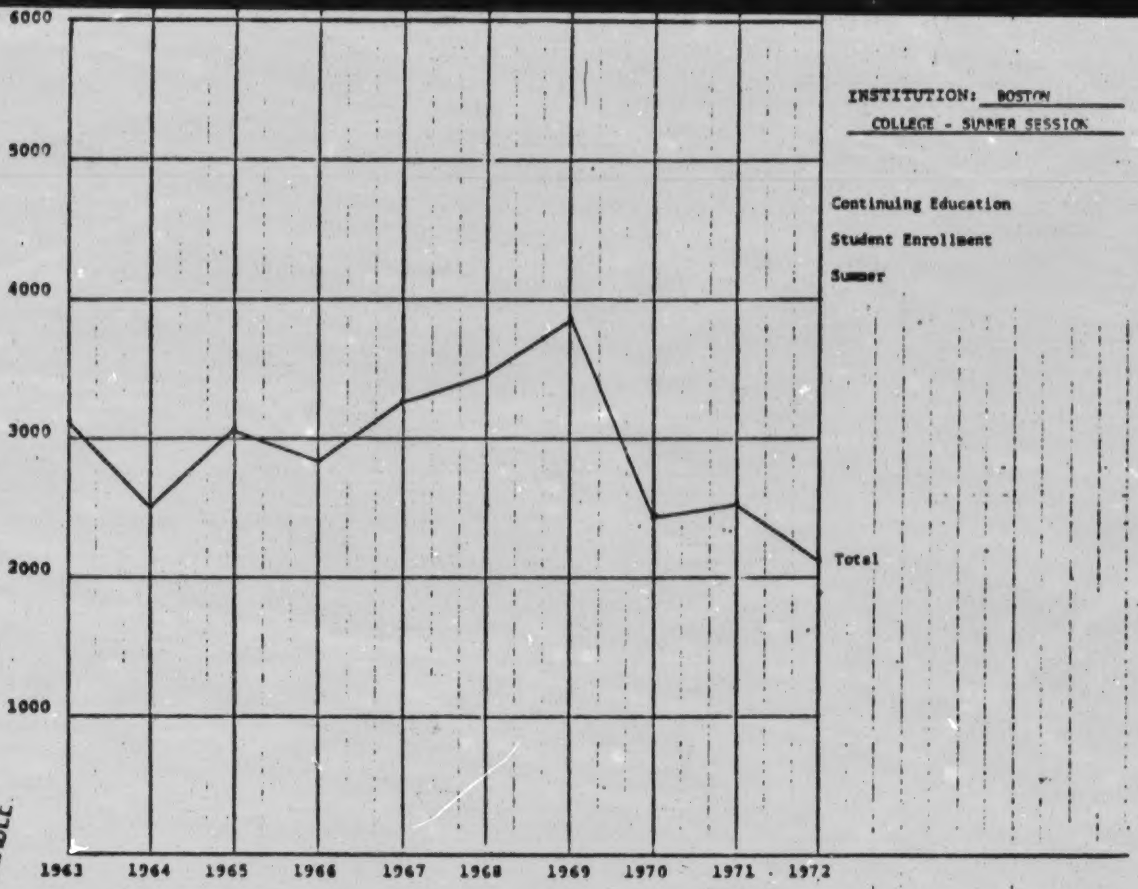
Continuing Education
Student Enrollment
Fall

BEST COPY AVAILABLE



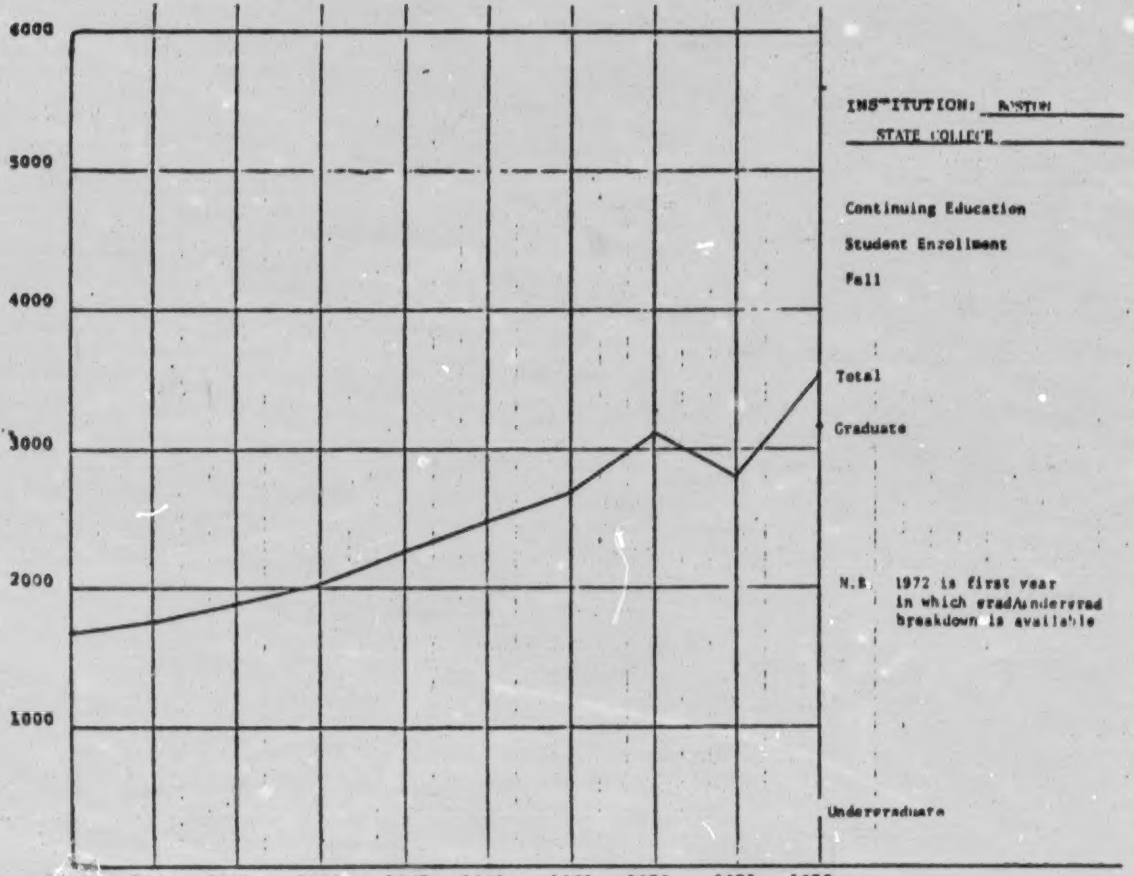


BEST COPY AVAILABLE



INSTITUTION: BOSTON COLLEGE - SUMMER SESSION

Continuing Education
Student Enrollment
Summer

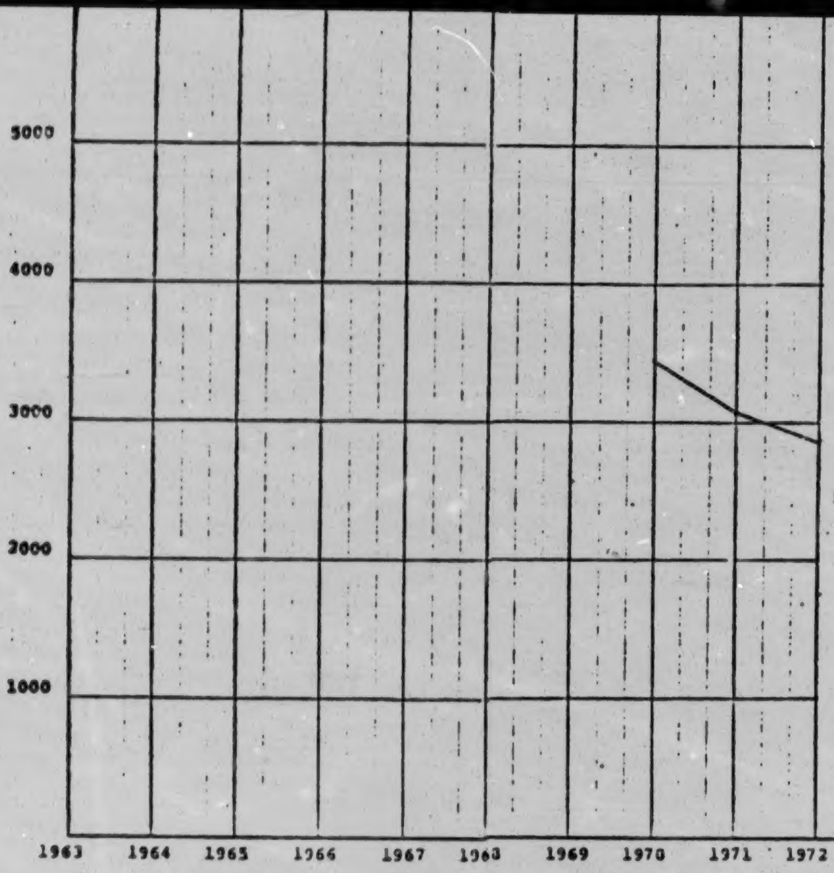


INSTITUTION: BOSTON STATE COLLEGE

Continuing Education
Student Enrollment
Fall

N.B. 1972 is first year in which grad/undergrad breakdown is available

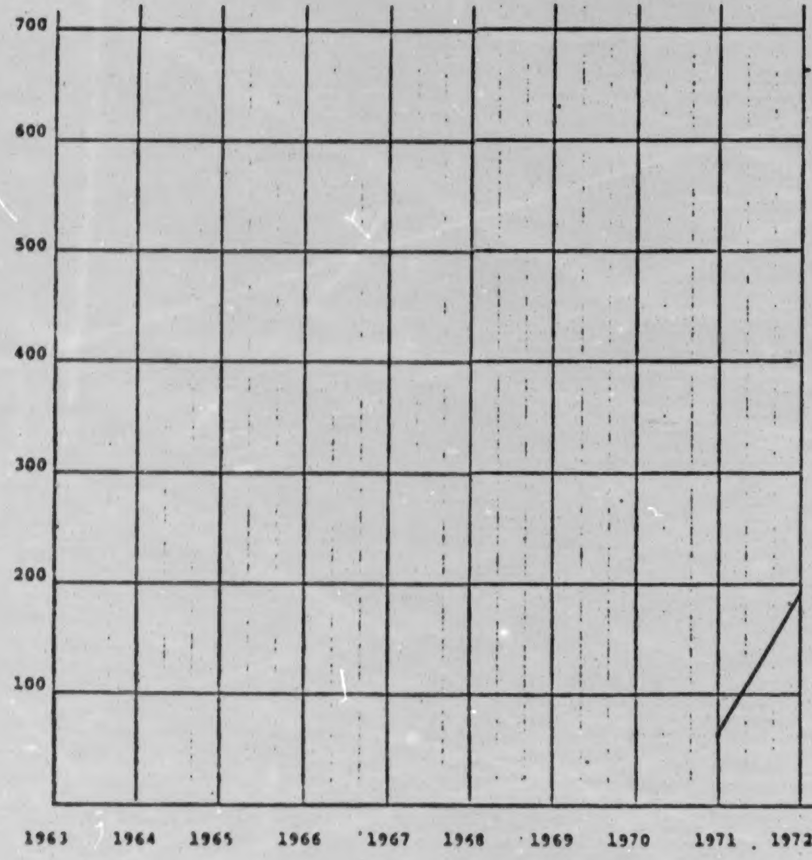
BEST COPY AVAILABLE



INSTITUTION: BOSTON U.
METROPOLITAN COLLEGE

Continuing Education
Student Enrollment
Fall

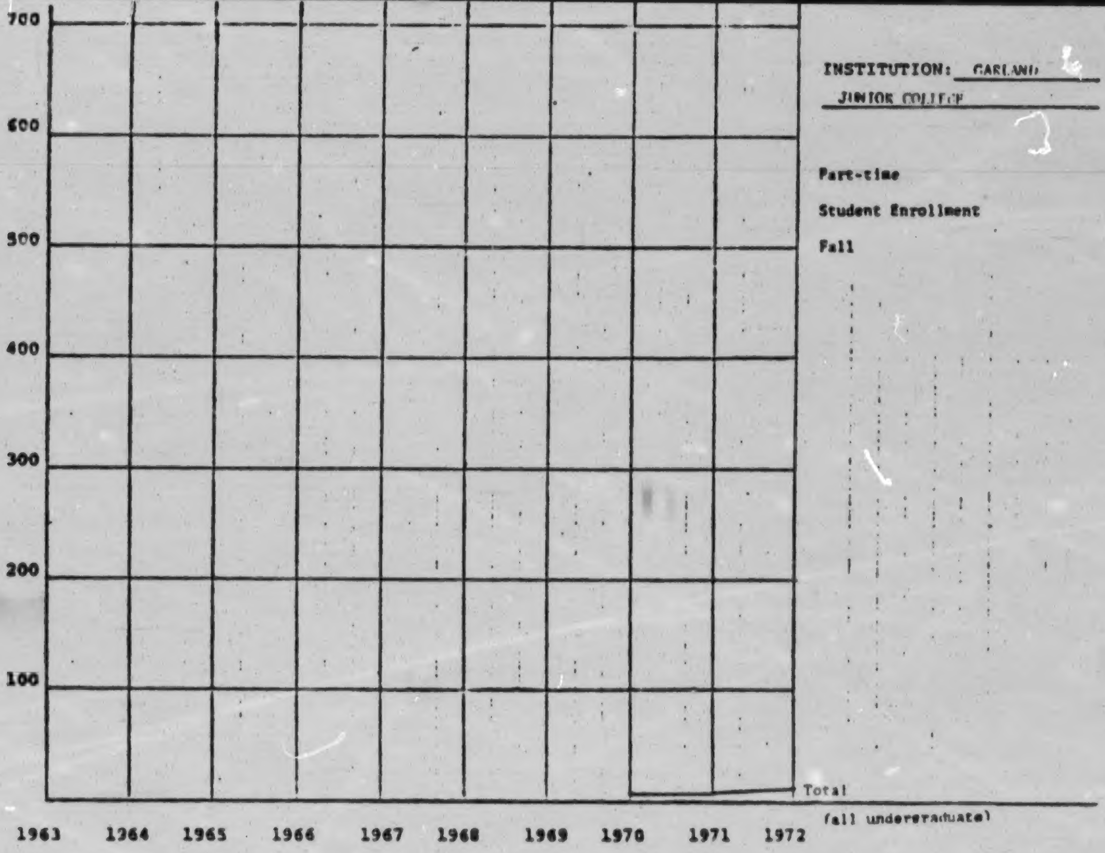
N.B. Only information reported



INSTITUTION: CURRY
COLLEGE

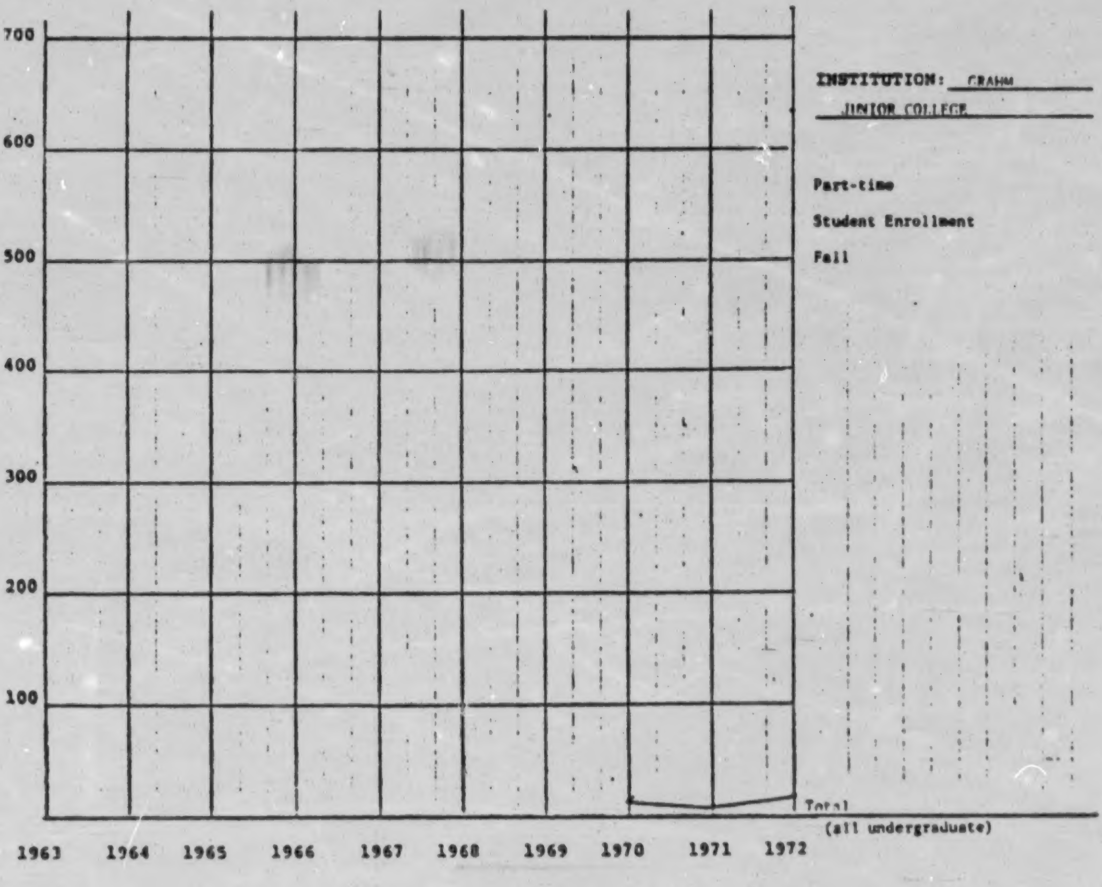
Continuing Education
Student Enrollment
Fall

BEST COPY AVAILABLE



INSTITUTION: GARLAND
JUNIOR COLLEGE

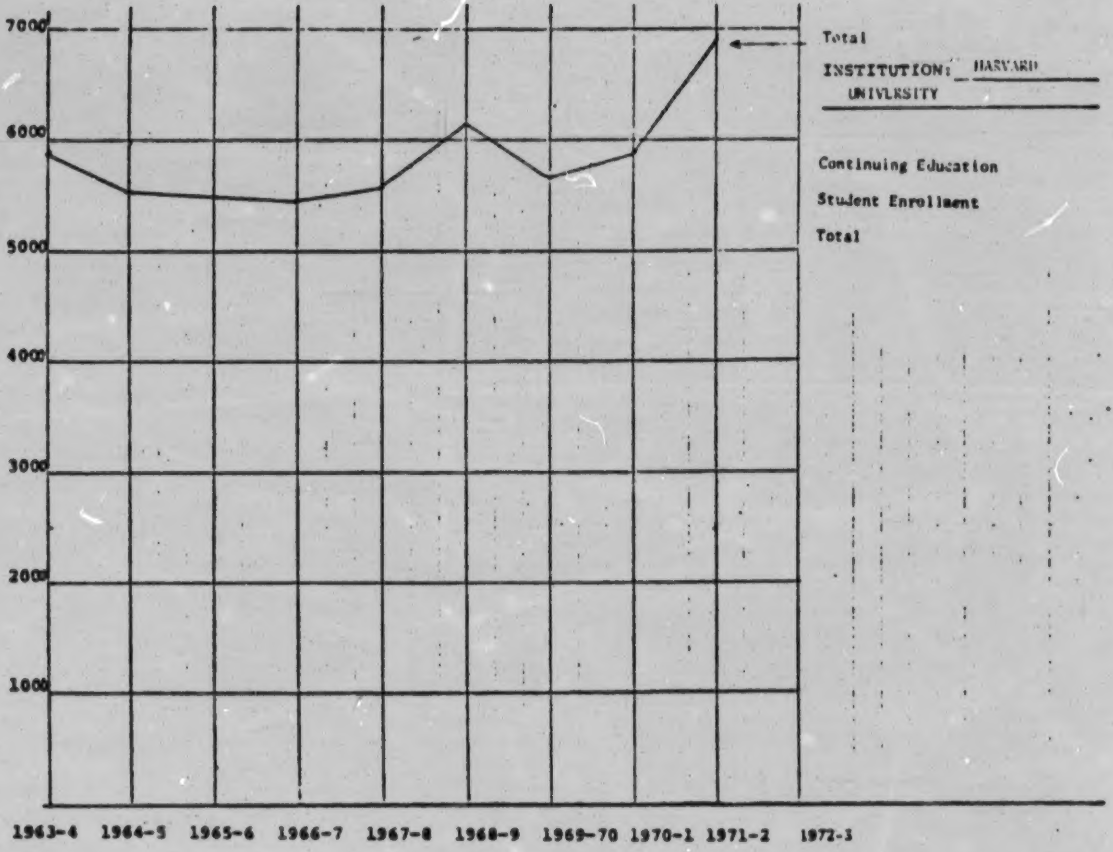
Part-time
Student Enrollment
Fall

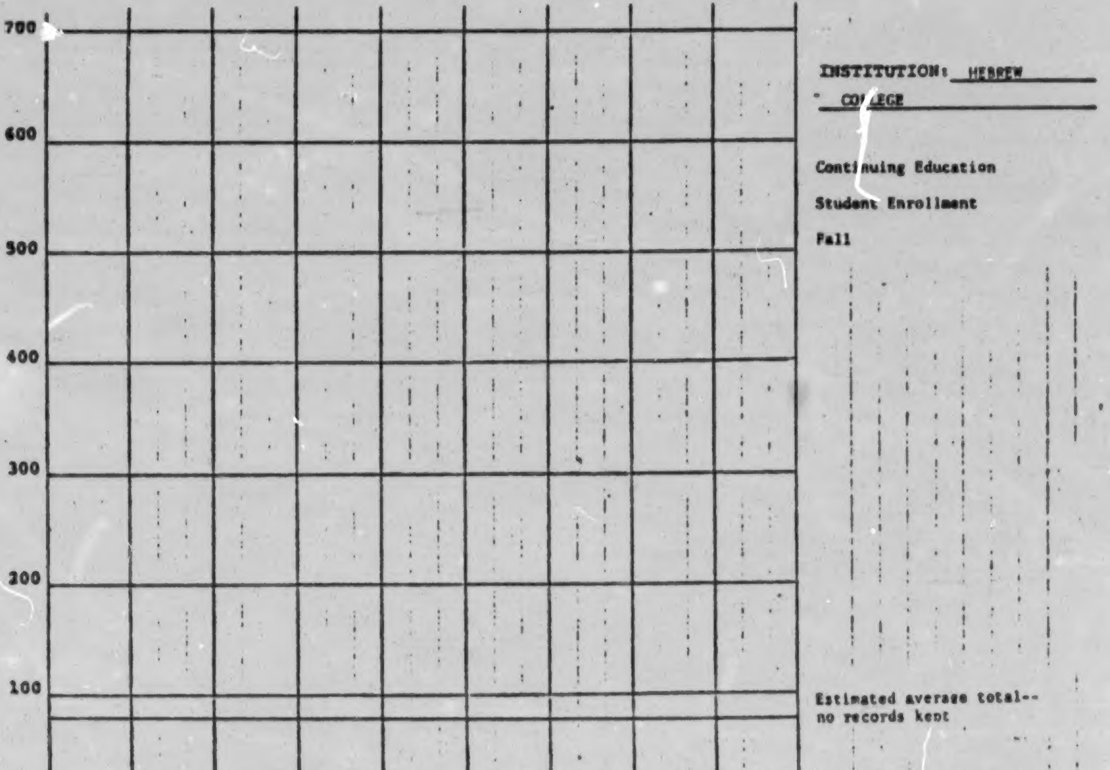


INSTITUTION: GRAHM
JUNIOR COLLEGE

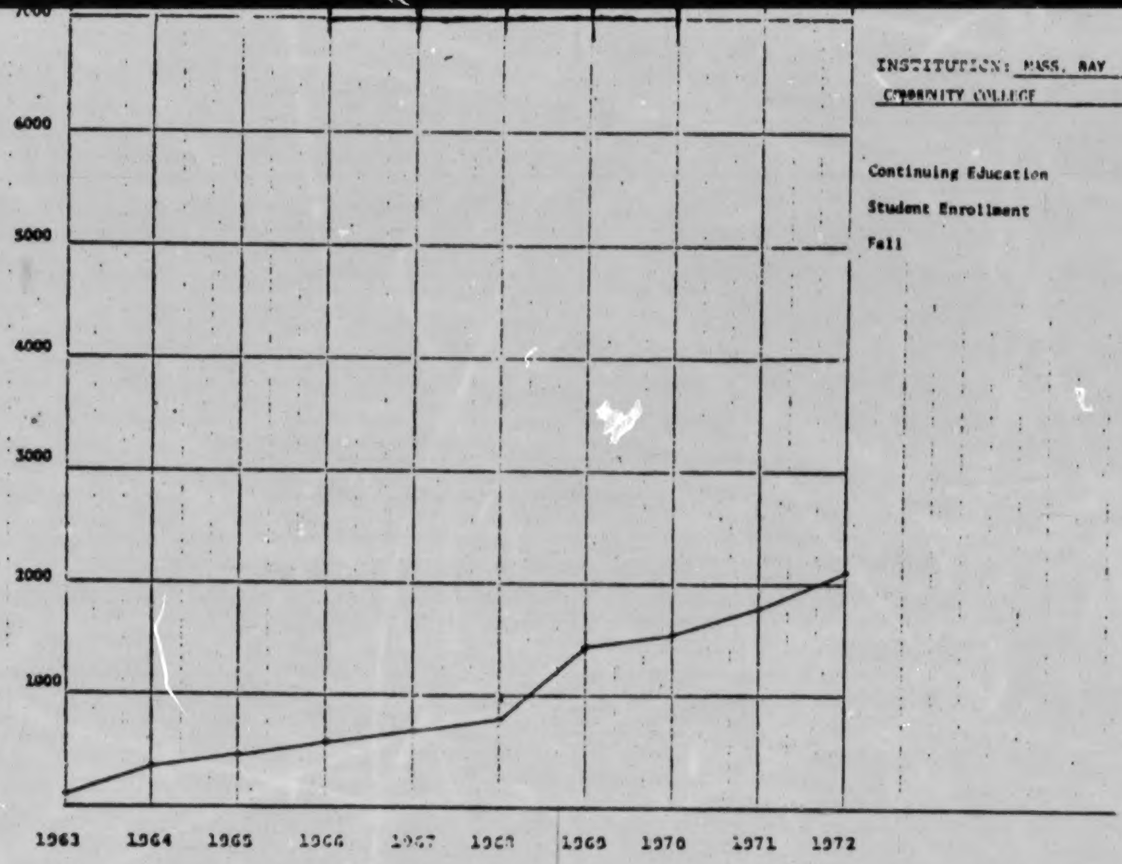
Part-time
Student Enrollment
Fall

BEST COPY AVAILABLE





BEST COPY AVAILABLE

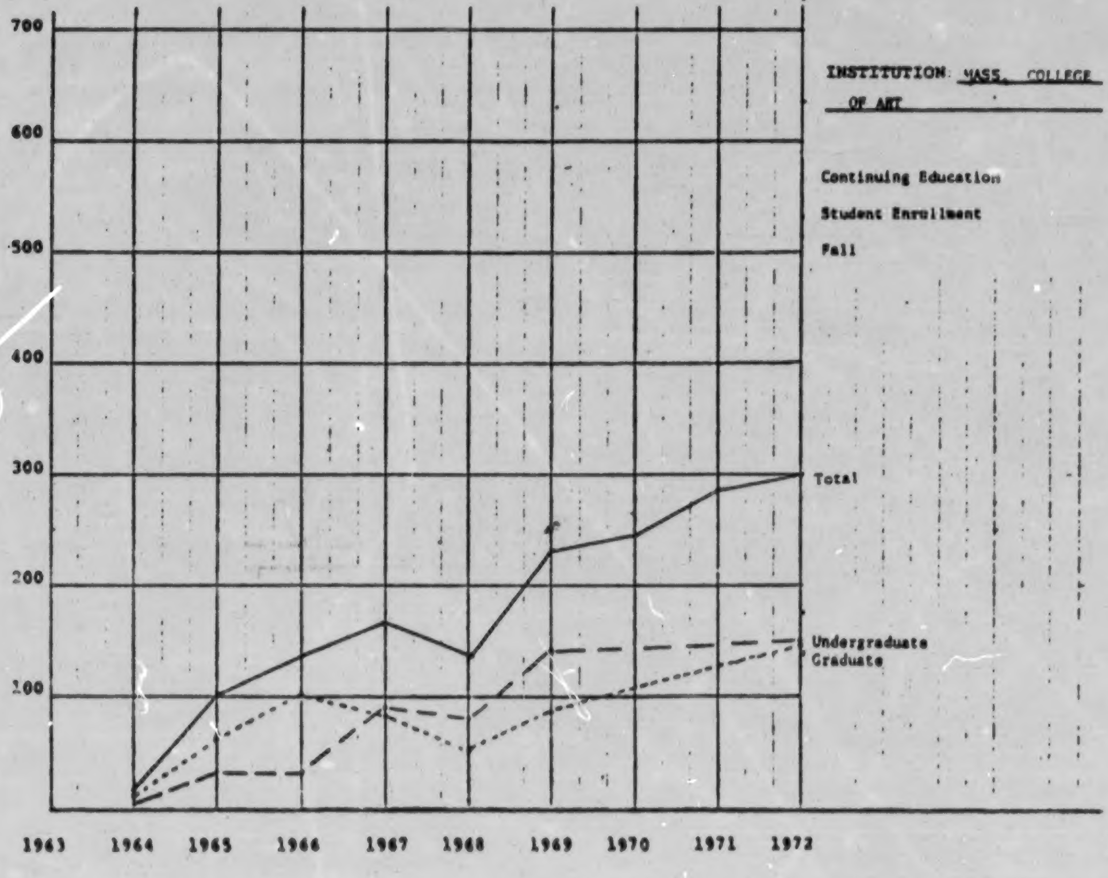


INSTITUTION: MASS. BAY COMMUNITY COLLEGE

Continuing Education

Student Enrollment

Fall

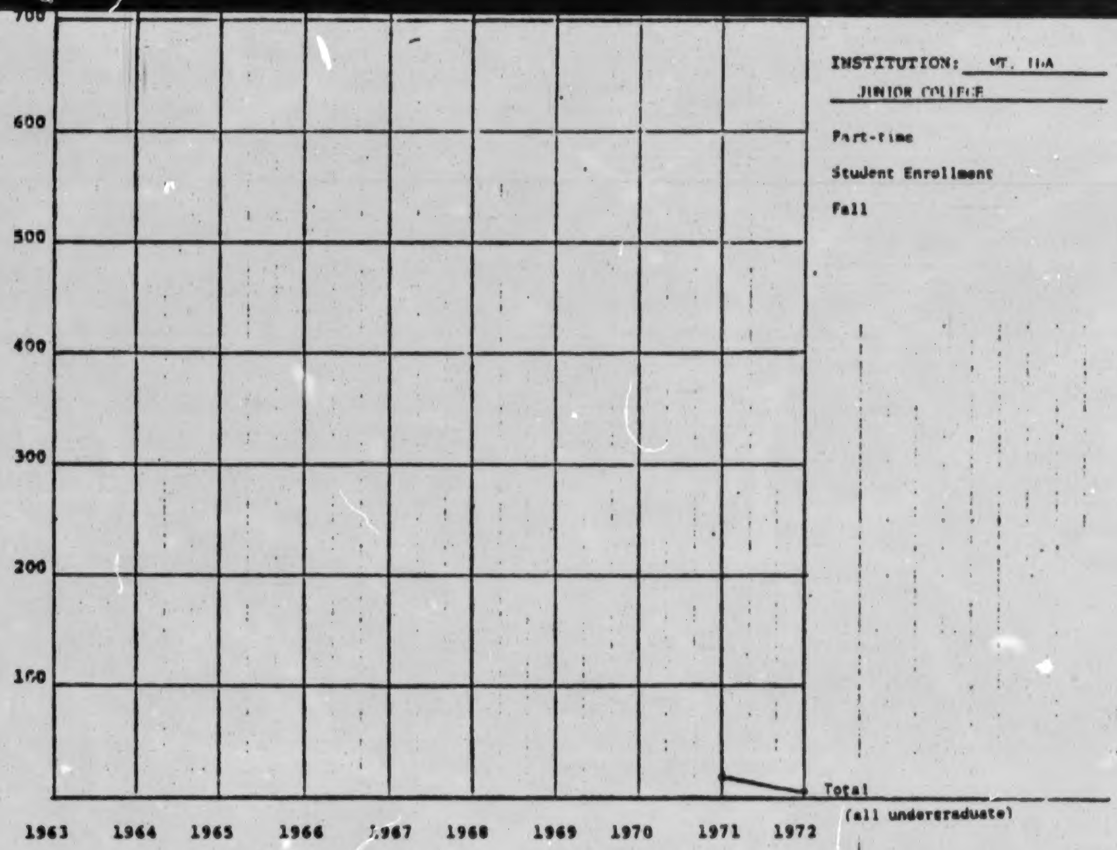


INSTITUTION: MASS. COLLEGE OF ART

Continuing Education

Student Enrollment

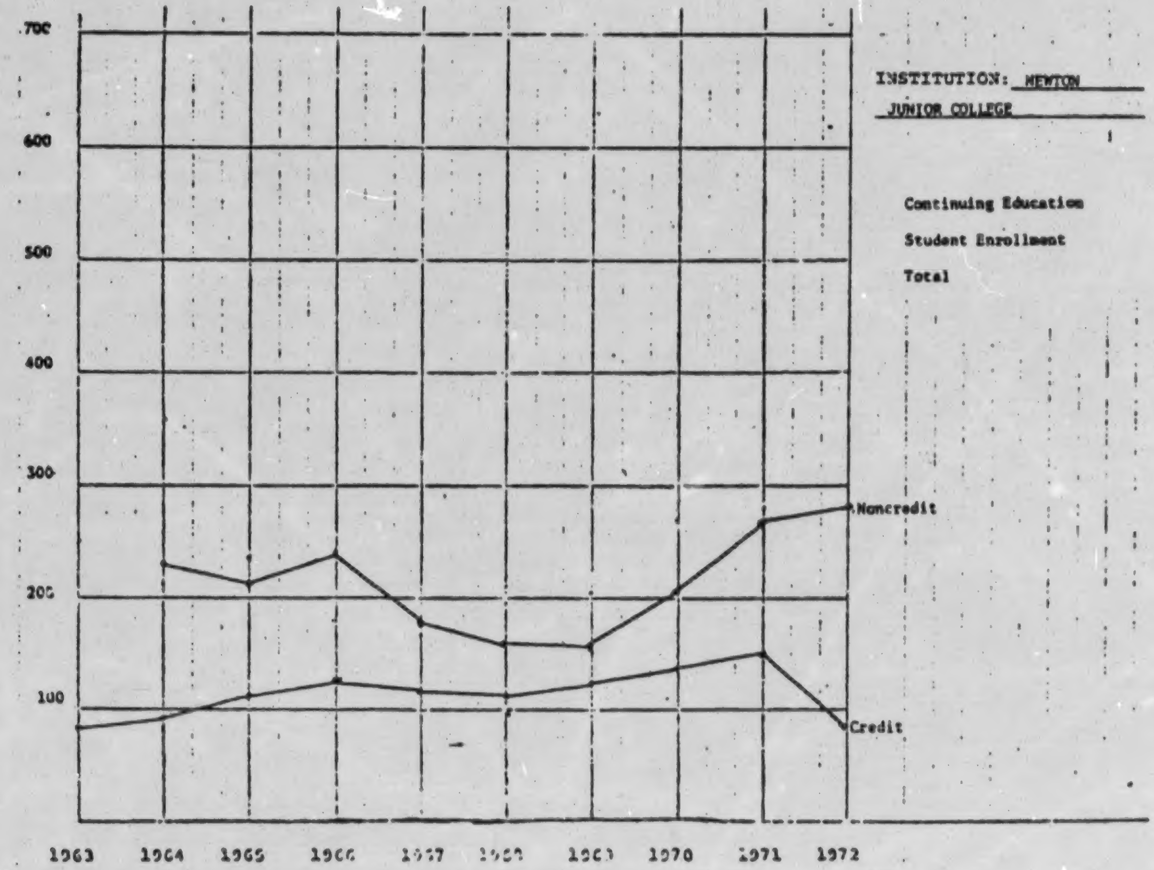
Fall



INSTITUTION: MT. IDA
JUNIOR COLLEGE

Part-time
Student Enrollment
Fall

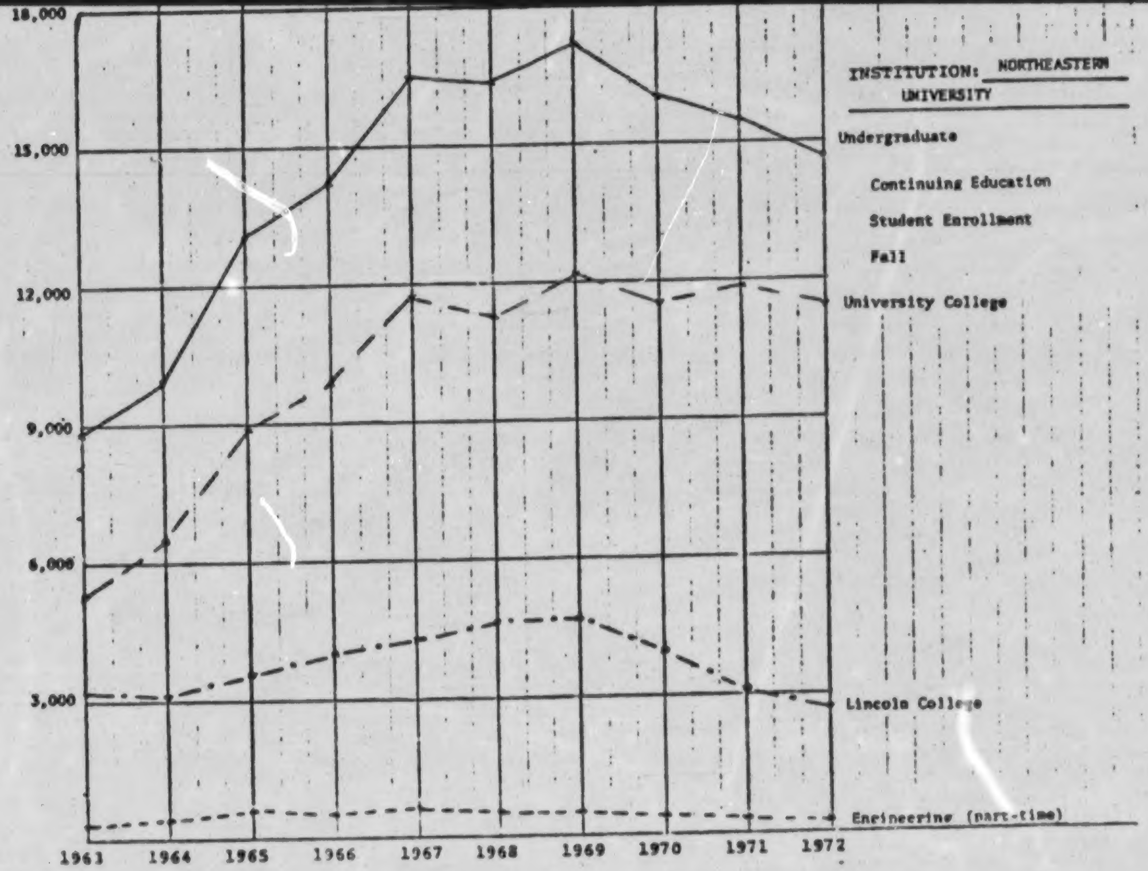
BEST COPY AVAILABLE

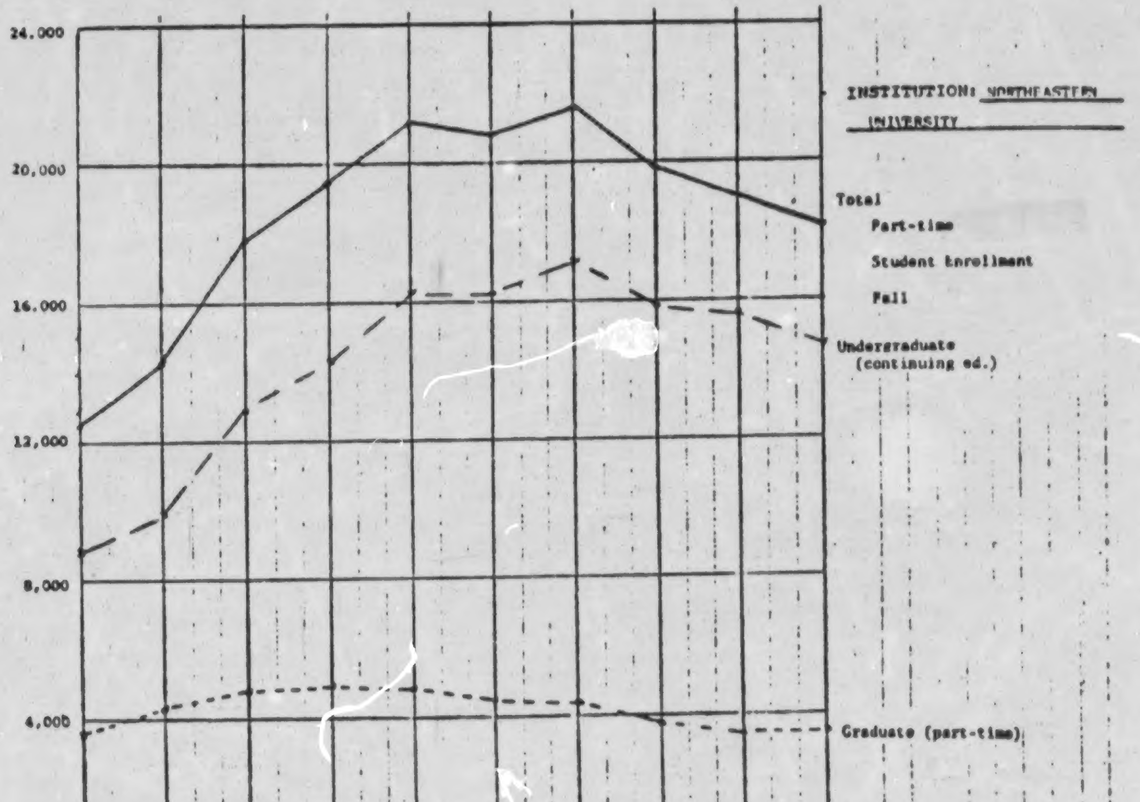


INSTITUTION: NEWTON
JUNIOR COLLEGE

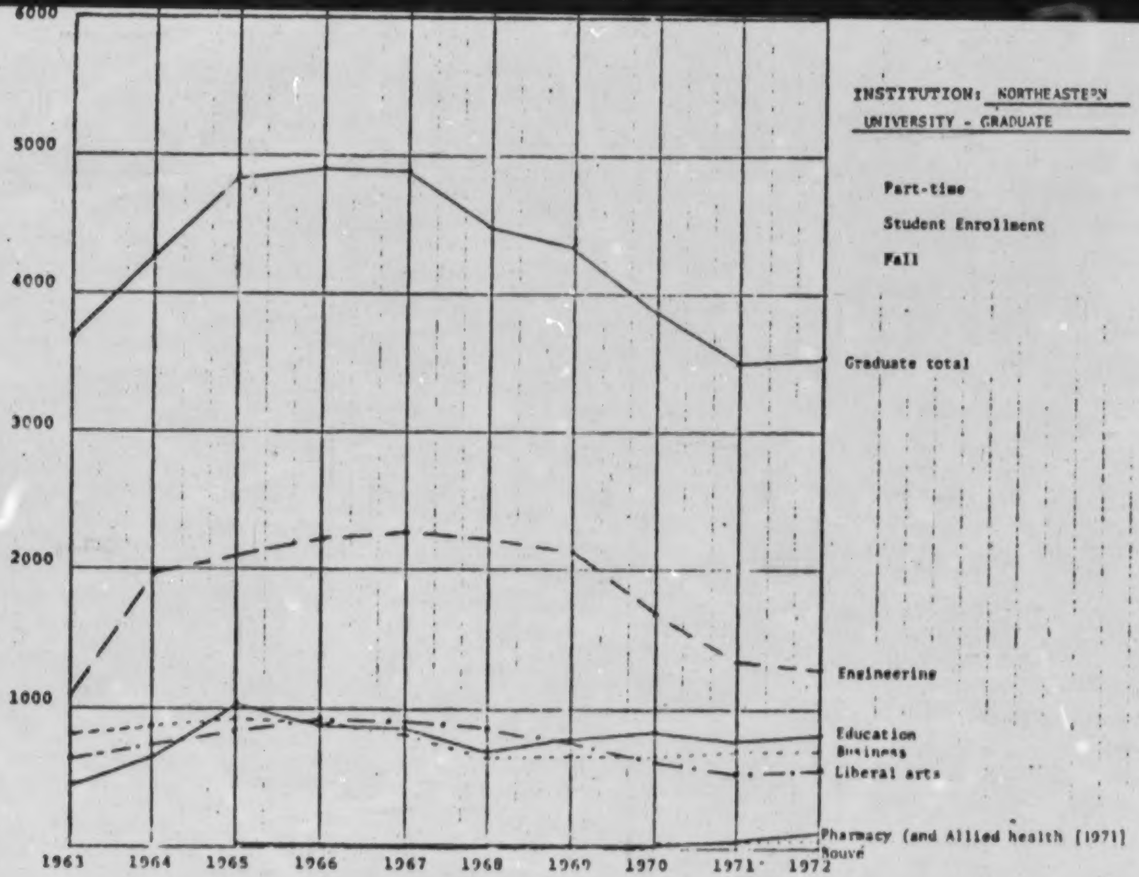
Continuing Education
Student Enrollment
Total

BEST COPY AVAILABLE





BEST COPY AVAILABLE

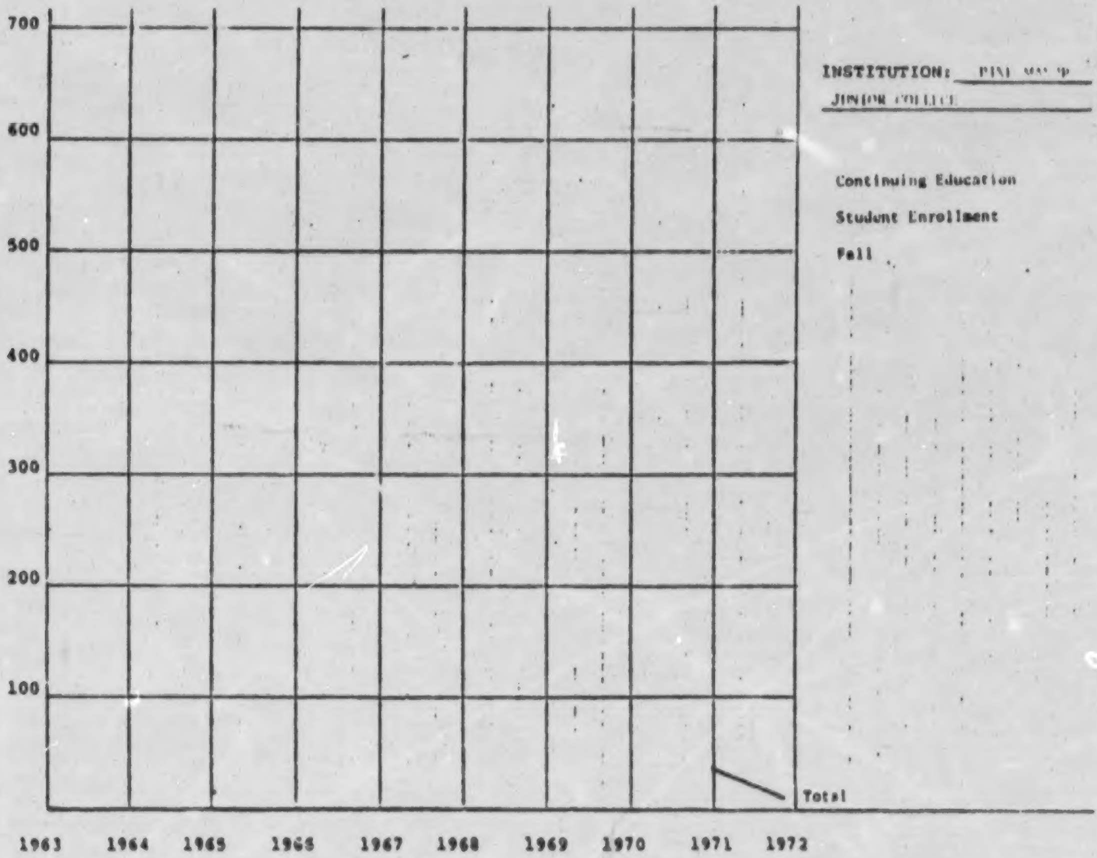


INSTITUTION: NORTHEASTERN UNIVERSITY - GRADUATE

Part-time

Student Enrollment

Fall



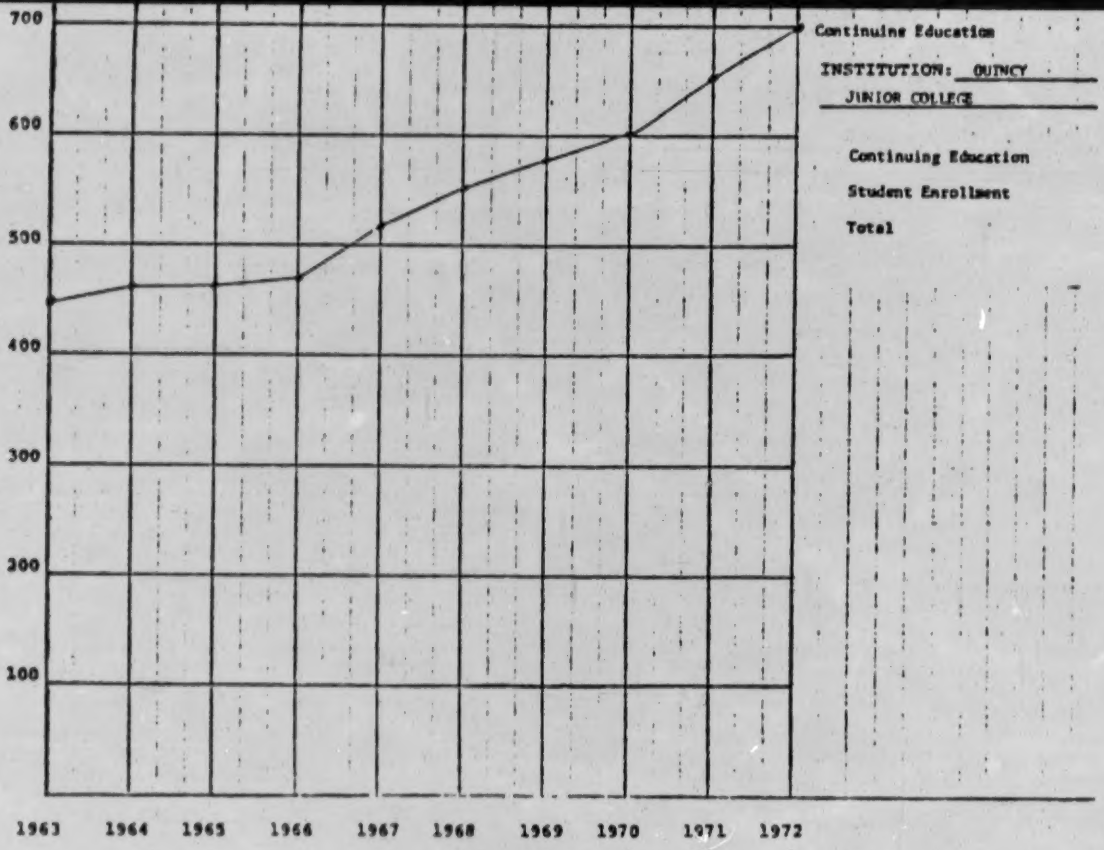
INSTITUTION: PINE MANOR JUNIOR COLLEGE

Continuing Education

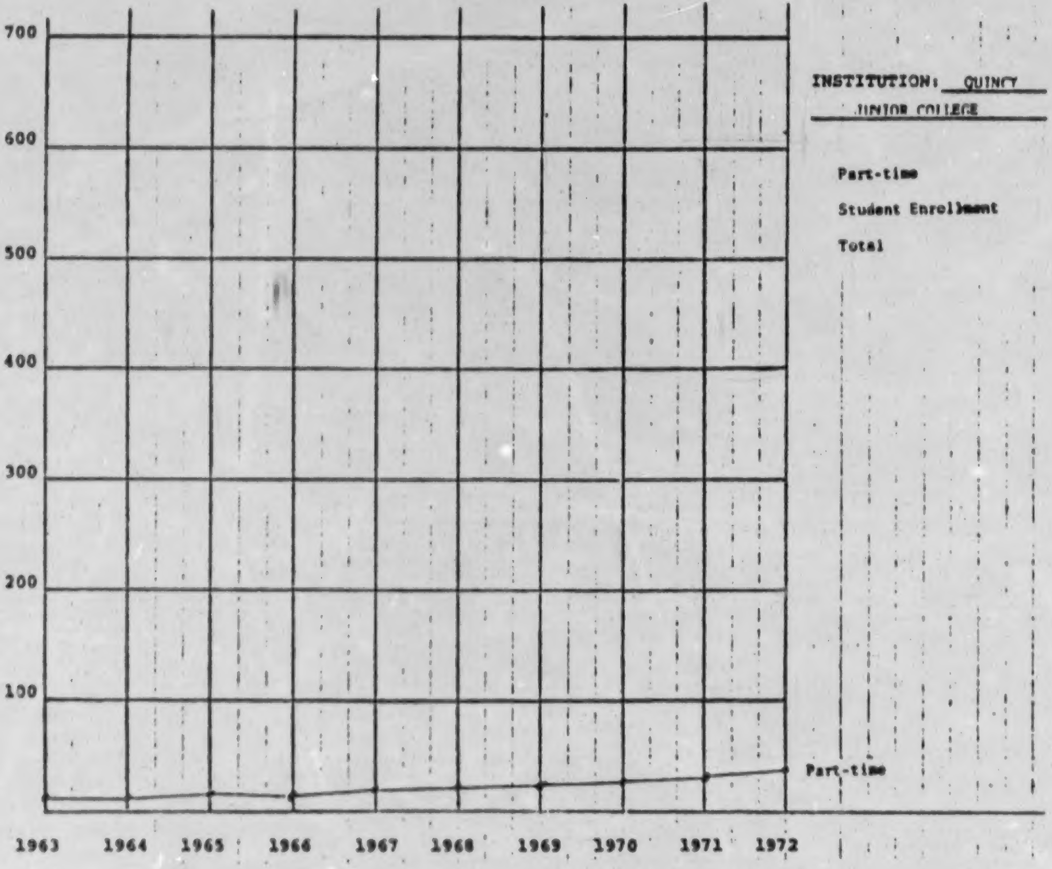
Student Enrollment

Fall

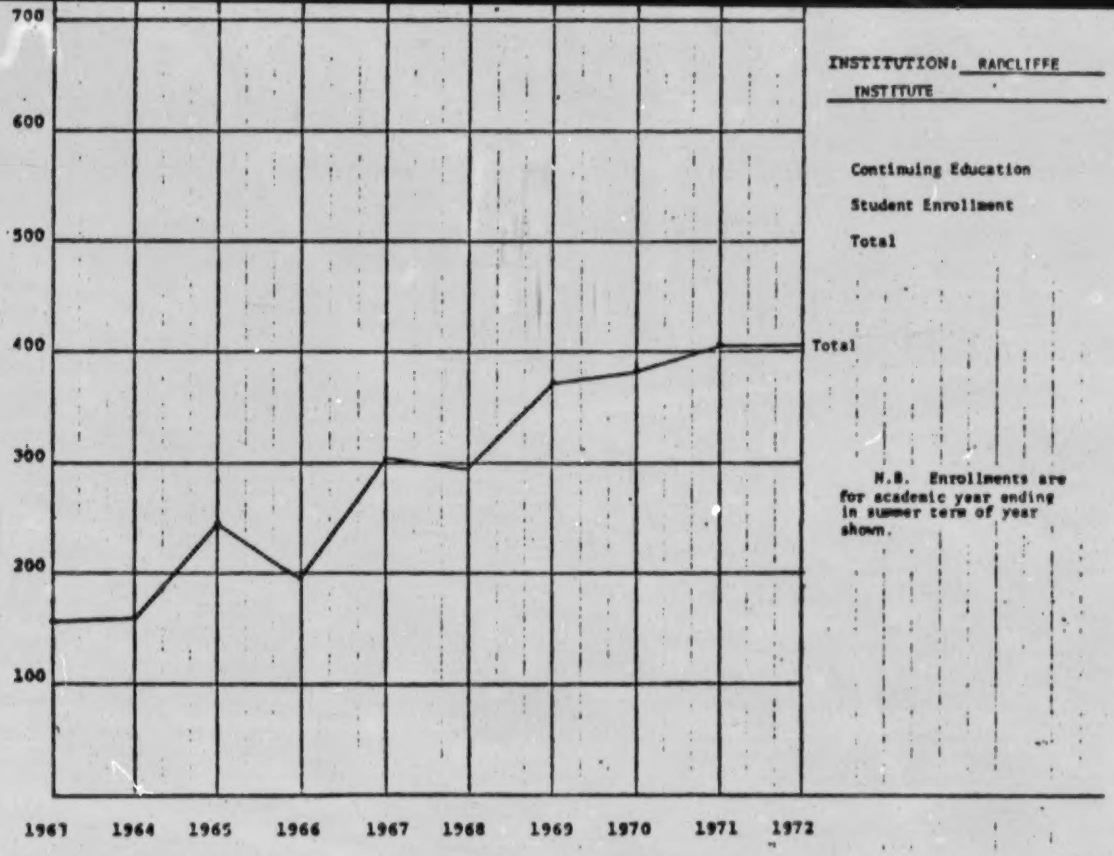
BEST COPY AVAILABLE


INSTITUTION: QUINCY JUNIOR COLLEGE

Continuing Education Student Enrollment Total


INSTITUTION: QUINCY JUNIOR COLLEGE

Part-time Student Enrollment Total

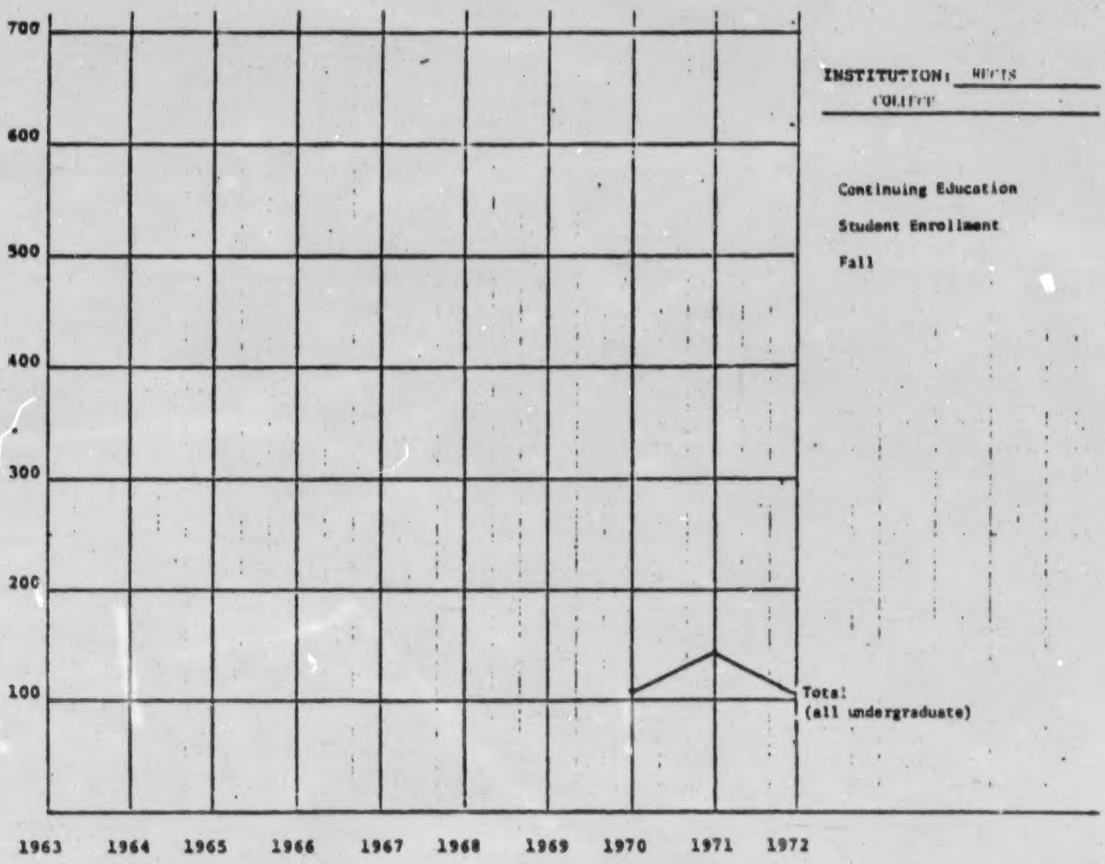


INSTITUTION: RADCLIFFE INSTITUTE

Continuing Education
Student Enrollment
Total

N.B. Enrollments are for academic year ending in summer term of year shown.

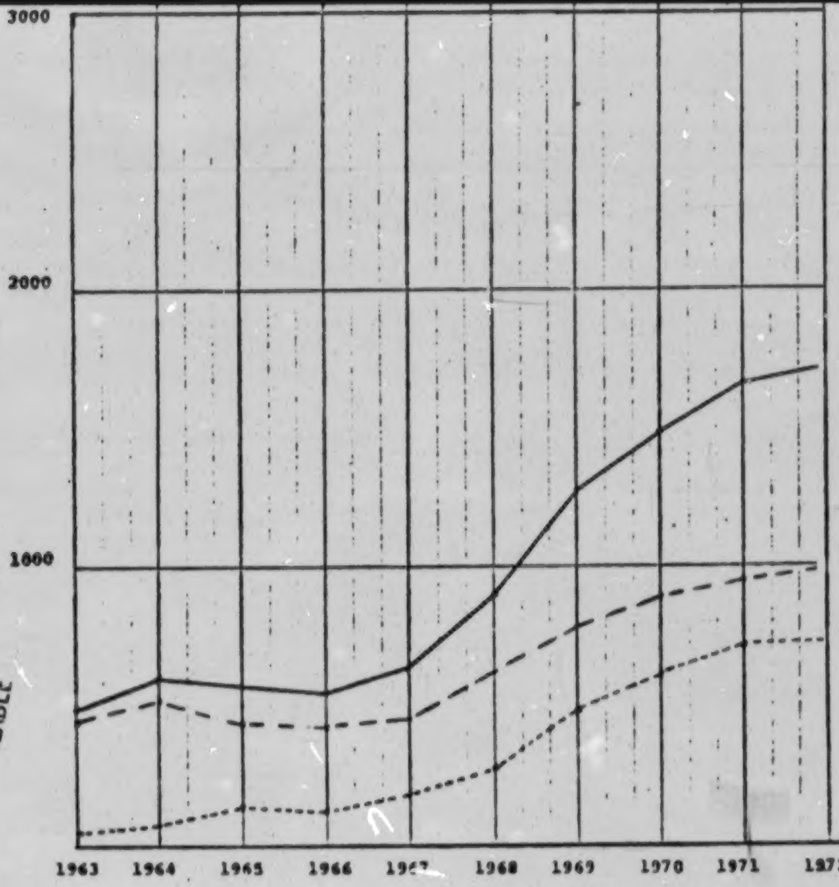
BEST COPY AVAILABLE



INSTITUTION: REGIS COLLEGE

Continuing Education
Student Enrollment
Fall

BEST COPY AVAILABLE

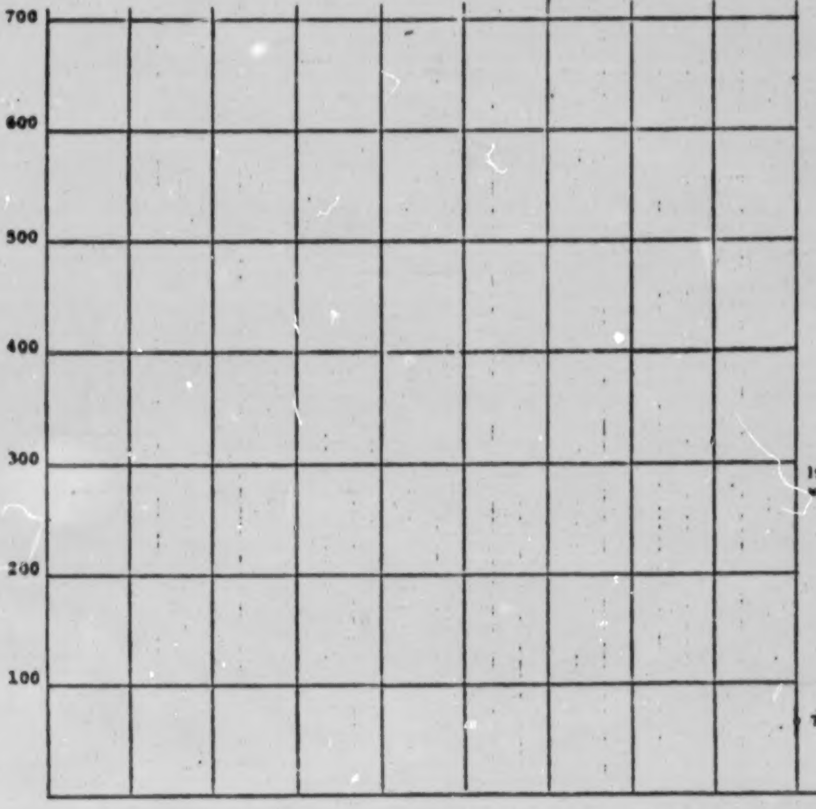


INSTITUTION: SUFFOLK UNIVERSITY

Continuing Education

Student Enrollment

Fall



INSTITUTION: TUFTS UNIVERSITY

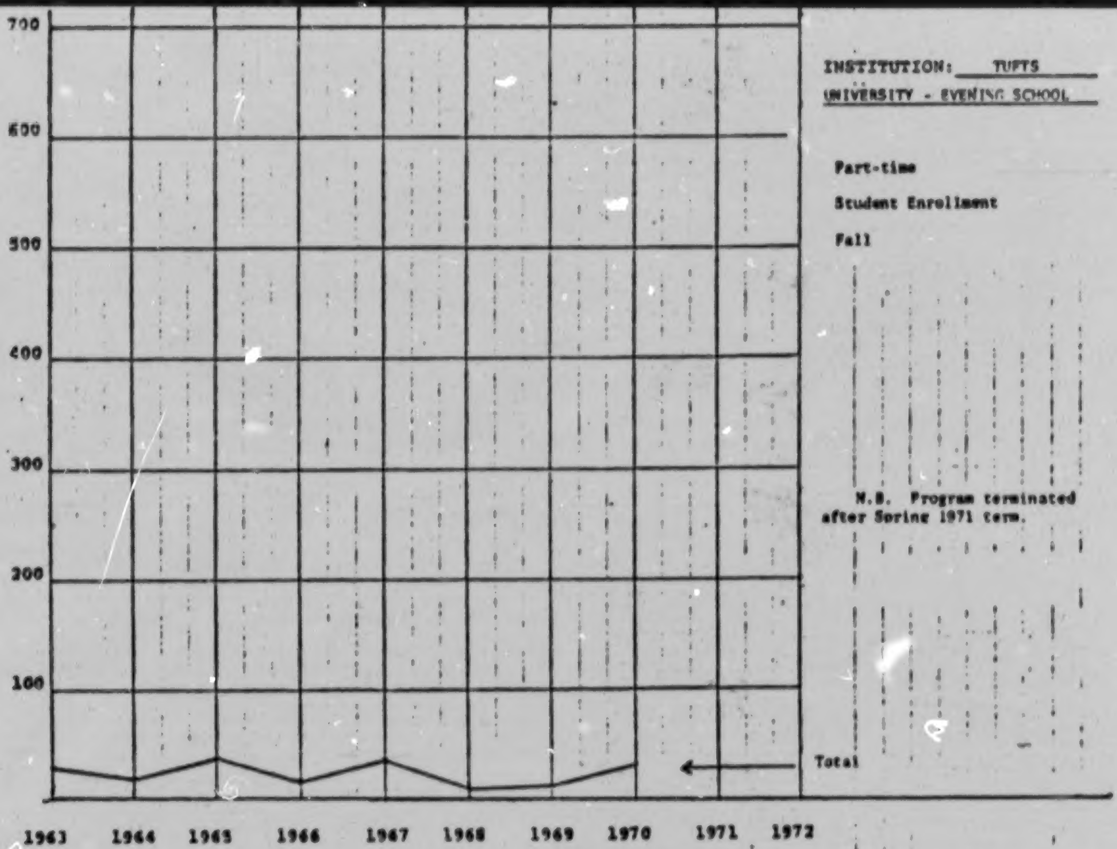
Continuing Education

Student Enrollment

Fall

N.B. Program began in 1971; data for that year was not reported.

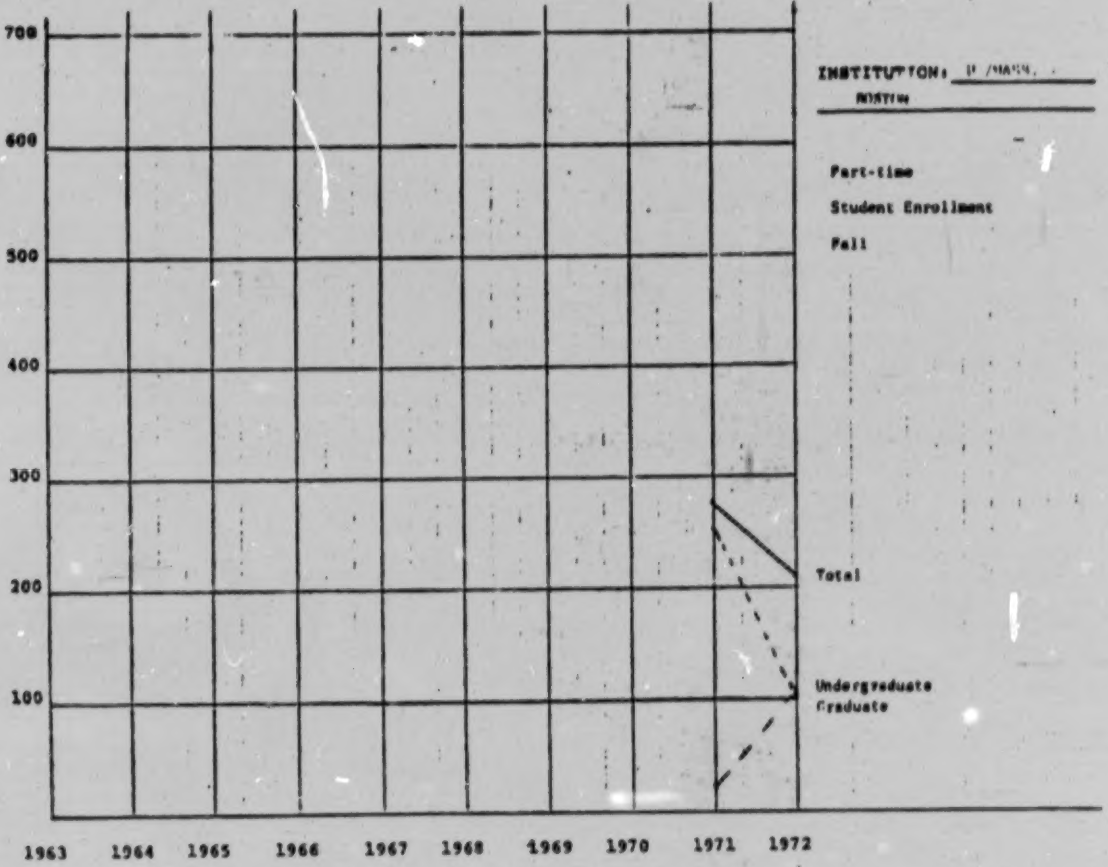
BEST COPY AVAILABLE



INSTITUTION: TUFTS UNIVERSITY - EVENING SCHOOL

Part-time
Student Enrollment
Fall

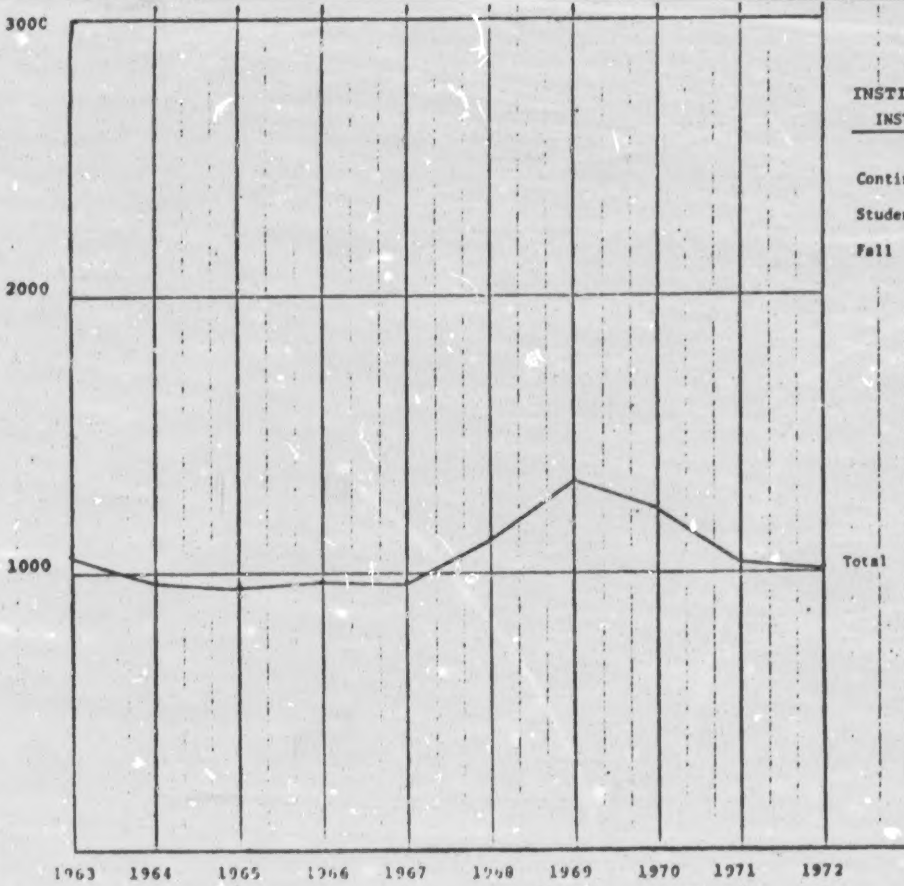
N.B. Program terminated after Spring 1971 term.



INSTITUTION: U/MASS. BOSTON

Part-time
Student Enrollment
Fall

BEST COPY AVAILABLE

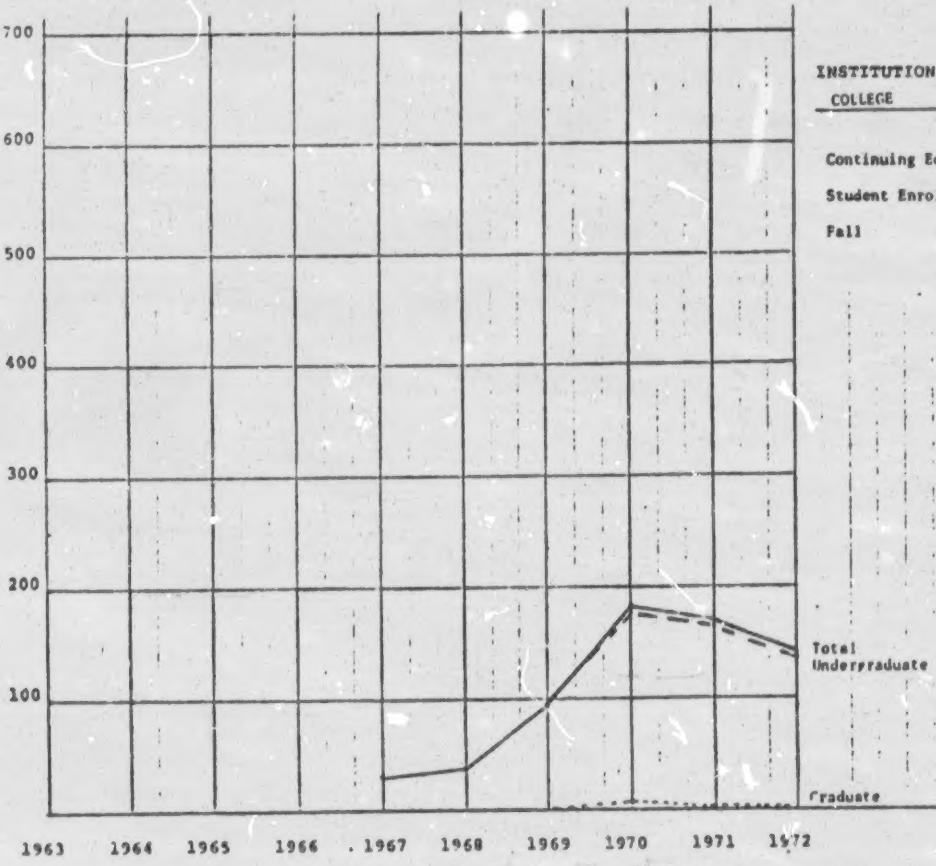


INSTITUTION: WENTWORTH INSTITUTE

Continuing Education

Student Enrollment

Fall

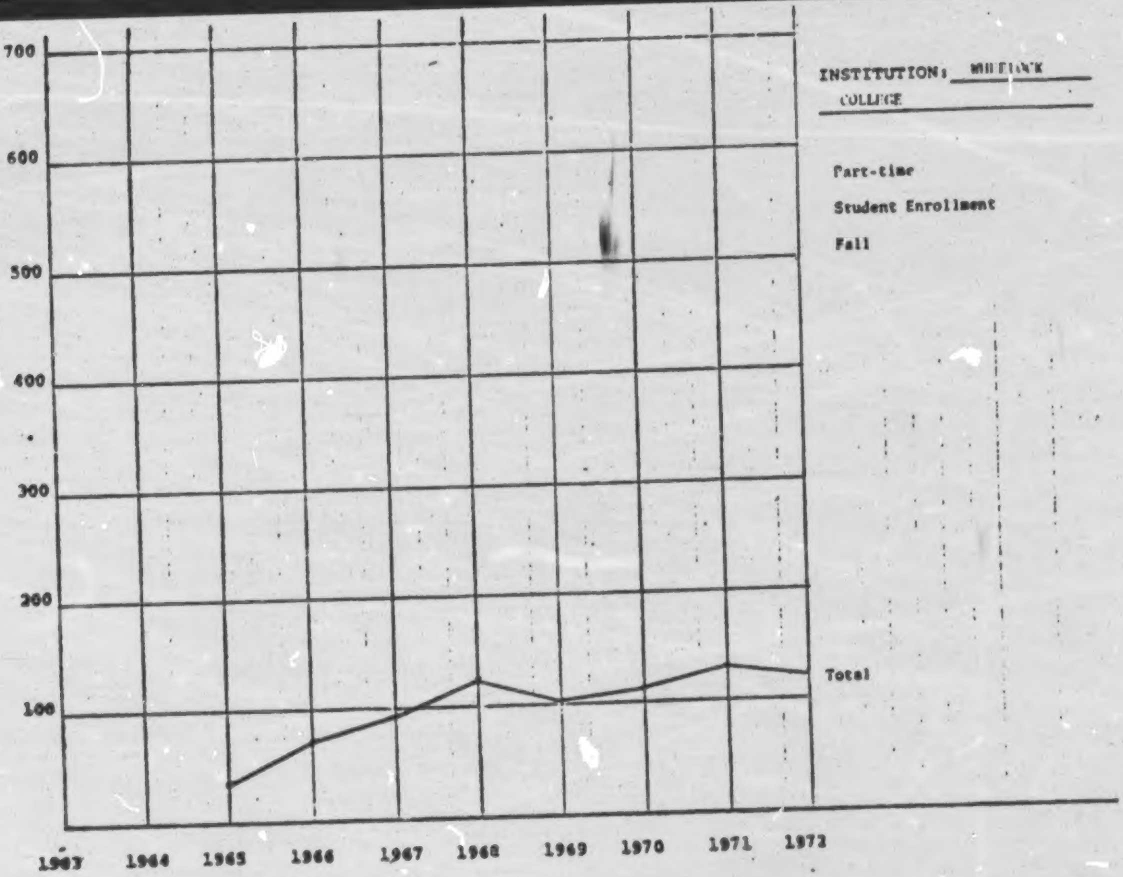


INSTITUTION: WHEELOCK COLLEGE

Continuing Education

Student Enrollment

Fall



INSTITUTION: WHEELOCK COLLEGE

Part-time
Student Enrollment
Fall

BEST COPY AVAILABLE

BEST COPY AVAILABLE

C. Inventory of Continuing Education Programs and Part-time Study Opportunities in Regular Full-time Programs

DISCUSSION. II-239
  Continuing Education Programs. II-239
  Part-time Study in Regular Full-time Programs. . . II-248

1. Program Inventory Tables: An Explanation II-249

2. Tables (Organized by Geographic Service Area and Substate Region)
  Table: Inventory of Programs Offered, Fall 1972, in Continuing Studies by Subject and Institution
  Table: Selected Characteristics of Continuing Education Programs Offered, Fall 1972
  Table: Course Registrations in Continuing Education Programs Offered, Fall 1972, By Subject
    Service Areas in Western Region. II-252
    Service Areas in Central Region. II-266
    Service Areas in Northeast Region. II-278
    Service Areas in Southeast Region. II-289
    Service Areas in Boston Region II-300

3. Part-time Study in Regular Full-time Programs. . . . II-317
  General Comments II-318
  Analysis by Substate Region. II-320
  Table: Credit Hours Enrollment of Part-time Students in Full-time Programs Offered, Fall 1972, By Subject II-326

DISCUSSION OF AN INVENTORY OF CONTINUING EDUCATION AND PART-TIME PROGRAMS

Prior to any examination of the existing programs of part-time and continuing education in Massachusetts, two points must be clarified. A primary consideration in this discussion is the area-specific nature of such programs. Study opportunities within a small geographic area of easy commuting distance from students' homes are what matter for an analysis of program scope and comprehensiveness. In the earlier discussion of geographic service areas the case for thirteen service areas based on residence concentration patterns of continuing education and part-time students was presented. That breakdown will be utilized to examine program characteristics such as duplication, scope, comprehensiveness, and competition.

Secondly, an important distinction must be made between continuing education and part-time programs. While the former usually offer courses which are specifically designed for part-time students (i.e., those students for whom education is not their major life activity), few special opportunities are available for part-time students in full-time programs. In theory, the full range of regular institutional program offerings are available to part-time students. Thus it is access to, rather than the mere existence of, programs that determines the nature of part-time study opportunities in full-time programs. Access factors include admissions policies, availability of financial aid, tuition costs, willingness of school to enroll part-time students, and the availability of special services. The extent of part-time study in full-time programs is a function of these factors and the demand for part-time study in a particular field.

In a sense, continuing education can likewise be viewed as based on regular, full-time programs. Demand factors compel a continuing education program to draw upon faculty and course resources in the regular division of the institution, just as is the case in part-time study. While continuing studies in many ways reflect the overall institutional academic offerings, it quite often reaches beyond the limits those offerings pose through the use of adjunct faculty and specially designed courses. In this manner, it can be distinguished from part-time study in full-time programs, and requires a separate analysis.

Given these two determinants of program analysis (namely, geographic considerations in terms of the thirteen areas and access regarding part-time students in full-time programs), the basic description of continuing and part-time study in Massachusetts is as follows:

Continuing Education Programs

To assess the scope and comprehensiveness of the programs offered in continuing education, three sets of inventory tables have been developed. One of these depicts the kind of degree and certificate programs available in fall 1972 by subject, using a modified form of the HEGIS (Higher Education General Information

Survey) classification system. Another lists course registrations in each institution using the HEGIS categories. Both these charts are organized on a geographic area basis within each of the five regional groups. A third chart allows an examination of selected characteristics of each degree program in a region. These include: degree offered, time offered, number of courses, number of students, number of degrees granted, and year started.

Using these sources, some general conclusions can be drawn about the available continuing education programs in Massachusetts, as well as some characteristics specific to each of the thirteen service areas.

Providers of continuing education can generally be grouped into different function categories. The degree-granting institutions tend to specialize at a certain level of degree programs. The community and junior colleges offer lower division courses leading to associate degrees, with a focus on either job placement or transfer to a four-year institution. The state colleges provide the bulk of graduate continuing education programs in the field of education, although some bachelor's degree programs are available. The private four-year colleges and universities offer academic degree programs at both the baccalaureate and graduate levels. Proprietary and independent institutions specialize in certificate or skill programs which are occupationally oriented, usually in business or technological fields. The avocational needs and interests of an area's adult population are catered to by a mix of municipal adult education programs and "community service" courses of degree-granting colleges and universities.

This diversity of function generally indicates that an area with a variety of educational providers will have a varied and broad continuing education system. In some cases, the specialization of institutions results in a limiting of educational opportunities, when no proprietary institutions, for example, are located in an area.

While this system seemingly works to broaden postsecondary educational opportunities for adults without undue duplication of resources, it breaks down under the influence of any one of these factors: 1) the presence of several institutions of the same type, resulting in a duplication of programs in high demand subject fields; 2) the lack of some provider type, resulting in the unavailability of its particular educational program; 3) the tendency of degree-granting institutions to offer a broader range of courses than degrees, resulting in competition over the large number of nondegree students; 4) the tendency of continuing education programs to meet the market demand by concentrating resources in popular subjects, to the exclusion of some less profitable but nonetheless needed fields.

In most areas, these factors have resulted in an emphasis on business and technical courses, subjects in which the market is large, the demand is high, and employers are willing to underwrite tuition costs for their employees. Similarly, law enforcement, fire science, and education programs are popular because government tuition assistance and job incentives create a large demand for courses in these fields.

Beyond these large programs, much of the remainder of continuing education activity occurs at three levels: 1) general studies programs at two-year institutions covering a wide range of academic areas but with little depth; 2) noncredit, specialized interest courses for adults; and 3) job-oriented programs at "periphery" institutions, especially in the metropolitan Boston, Worcester, and Springfield areas.

Where schools are numerous and population density is high, the competition between institutions seems to be intense. One area in which this can be seen is the greater Springfield area, where two community colleges (Holyoke and Springfield Tech), three private colleges (American International, Western New England, and Springfield), and a state college (Westfield) have been vying for their share of the area's educational market. One apparent result has been the widespread planning for new degree programs, attempts designed to tap new markets in an area already saturated with educational opportunities. Westfield State is planning ten new bachelor's degrees, most of them in fields where there are no such existing programs in the area. Two private colleges are planning new master's degrees in education, a field which already has a high concentration of academic opportunities. Bay Path Junior College is planning to embark on its first degree program this year, offering an associate degree in liberal arts, child study, and mental health.

Such a pattern of program offerings indicates a high level of competition as well as a broad range of opportunities for area adults in terms of both subject and degree level. Articulation from one degree to a higher academic level is possible in several fields (a situation which is relatively uncommon in continuing education in Massachusetts). Thus, a competitive climate in an active market area has resulted in a broad and comprehensive range of continuing studies opportunities.

A somewhat similar situation in the Worcester area--several institutions of different types and a large population--has fostered a slightly different set of continuing education programs. Duplication of degrees is virtually nonexistent, the only cases involving Quinsigamond Community College and Worcester Junior College in associate level business and liberal studies programs where the competition is severe and to the detriment of Worcester Junior College. But while the available degrees cover a range of subjects almost as varied as in Springfield, the same kind of depth is lacking. Articulation from associate to higher level degrees is possible in only business and general studies. Graduate level programs are strong in education and engineering, but opportunities in other subjects are quite limited. In Worcester, as in Springfield, an active adult education program offers many noncredit, special interest courses that supplement the degree and course offerings in the colleges and universities.

In contrast, the continuing education programs in the Southeast do not cover many fields, nor do they allow degree articulation. The heaviest concentration of academic degree courses occurs in business administration. Bridgewater State has extensive master's programs in education, but only one school in the region offers an education degree below the graduate level (Associate in elementary education at Bristol Community College). The only engineering degrees available are at the associate level, closing off any opportunity for advanced work in the field for area residents. Only one institution, Southeastern Massachusetts University, offers degrees at the baccalaureate level, in business administration and humanities. Thus, even combining the three areas in the region, the picture is one of low levels of competition, limited scope of degree programs, and few opportunities for degree articulation.

Another unique situation occurs in the Northeast region, where public and private institutions are competing at several levels. Northeastern University operates three branch campuses in the region, which have experienced declining enrollments since the opening of several, lower priced community colleges. Most of this competition occurs at a course level, since Northeastern degrees are available only at the Burlington campus in a few fields. Articulation is especially well-provided for in engineering in the Andover/Lowell area, where Lowell Technological Institute expanded its bachelor's programs as the community colleges entered the engineering technology fields at the associate degree level. Similar articulation in business degrees is apparent. Expansion is planned in the already broadly covered occupational areas to meet future employment demands. Middlesex, for example, will institute two associate degrees in the growing health services field.

There are other areas in the state, such as in Pittsfield/North Adams, where the limited number of educational providers is the primary determinant of study opportunities. In contrast to Worcester and Springfield, program scope and articulation in these areas are severely limited in all but a few fields. Full data on each area is presented, from which the above conclusions regarding continuing education programs were drawn. A brief description of the characteristics of each follows, with a detailed look at the Worcester area as an example of one area structure of continuing education programs.

Springfield area: In terms of both subjects offered and degree-level available, area adults are being given a broad range of educational opportunities. While a wide variety of programs are available, high degrees of competition are apparent in education, business, and engineering fields. Except for direct competition between American International and Western New England Colleges in bachelor's in business administration programs, little degree duplication is evident. Degree articulation from associate to higher level degrees is possible in most subjects, and numerous new degree programs are planned. The adult education program in Springfield provides many community interest, vocational, and practical courses that supplement the degree and course offerings in the area's colleges and universities. (This brief overview is incomplete--important detailed analysis of program and course competition is in the text and charts for this area.)

Pittsfield/North Adams area: There is no duplication of degree programs, since Berkshire Community College offers only an associate degree, while North Adams State has bachelor's and graduate programs. Although North Adams State offers a broader range of bachelor's degree programs in noneducational fields than most state colleges, the depth of these programs is small. (This brief overview is incomplete--important detailed analysis of program and course competition is in the text and charts for this area.)

Amherst/Northampton area: This area, much less a unified, discrete unit than the others, contains two institutions that offer no duplicative degree programs. On the noncredit program level, both U./Mass.-Amherst and Greenfield Community College have a broad range of offerings. (This brief overview is incomplete--important detailed analysis of program and course competition is in the text and charts for this area.)

Worcester area: Despite the high concentration of continuing education programs, duplication - in terms of degree programs - is minimal. Quinsigamond offers the only associate degree in several occupational programs. Worcester State has a monopoly on graduate programs in education, although they have been under a moratorium on these degrees pending further study. Should these be no longer offered, no graduate programs in this field would be available in the Worcester area. Similarly, Worcester Polytech (W.P.I.) provides the only available graduate degrees in business, engineering, mathematics, and physics.

Anna Maria College has only one continuing studies degree program - a B.S. in health studies designed for nurses that was instituted in 1972. It is the only such program available. Similarly, Clark University and Assumption College offer bachelor's degrees in nonduplicative fields.

The only direct, but severe, degree competition in the area occurs at the associate level between Quinsigamond and Worcester Junior College, in business management, and interdisciplinary liberal studies. The former programs are roughly equal in size, while Quinsigamond's liberal studies program is several times larger.

From the standpoint of a student seeking a particular degree in a particular field in the Worcester area, the choice is clear. With the

INVENTORY OF PROGRAMS OFFERED FALL, 1972 IN CONTINUING STUDIES, BY SUBJECT AND INSTITUTION

WORCESTER AREA

KEY

A-associate degree
B-bachelor's degree
G-graduate program
C-certificate
S-credit special program (no degree)
N-non-credit special program
X-cross-registered
*-planned program

BEST COPY AVAILABLE

						BUSINESS							EDUCATION					
		Agriculture	Architecture	Area Studies	Biological Sci.	Accounting	Banking/Finance	Business Admin.	Secretarial	Other	Communication	Computer Sci.	Elementary	Secondary	Early Childhood	Vocational	General	Other
WORCESTER AREA	Quinsigamond C.C.							A										
	Assumption College																B	
	Clark University							B										
	Worcester State												G	G			G	G
	Worcester Polytech							G				G						
	Anna Maria College																	
	Worcester Jr. Col.						A	A		C								

	ENGINEERING									HEALTH									
	Chemical	Civil	Electrical	Mechanical	Other	Fine Arts	Applied Arts	Foreign Lang.	Hospital Mgmt.	Medical Tech.	Nursing	Other	Home Economics	Child Care	Letters (Arts & Sci)	English	Philosophy	Library Sci.	Law
Quinsigamond C.C.																			
Assumption College								B								B			
Clark University						B													
Worcester State																			
Worcester Polytech			G	G															
Anna Maria College												B							
Worcester Jr. Col.		A	A	A	A														

							PUBLIC AFFAIRS			SOCIAL SCIENCES							INTER-DISCIPLINARY			
		Mathematics	Military Sci.	Physics	Chemistry	Psychology	Public Admin.	Social Work	Other	Economics	History	Political Sci.	Sociology	Urban Studies	Other	Community Affairs	General Studies	Liberal Arts	Other	Unclassified
WORCESTER AREA	Quinsigamond C.C.																A	A		
	Assumption College							B			B		B							
	Clark University																B			
	Worcester State																			
	Worcester Polytech	G		G																
	Anna Maria College																			
	Worcester Jr. Col.																	A		

OCCUPATIONAL PROGRAMS

		BUSINESS/COMMERCE							HEALTH SERVICE						PUBLIC SERVICE			
		Accounting	Finance/Banking	Management	Marketing	Secretarial	Other	Data Processing Technology	Medical Tech.	Nursing	Other	Mechanical Engr. Technology	Environ Tech.	Food Service Tech.	Community Health	Police/Law Enforce	Fire Sci. Tech.	Other
WORCESTER AREA	Quinsigamond C.C.					A			A		A		A			A	A	A
	Assumption College																	
	Clark University																	
	Worcester State																	
	Worcester Polytech			C														
	Anna Maria College																	
	Worcester Jr. Col.											B						

two exceptions noted in the previous paragraph, the sole determinant is which school offers it. In terms of scope, the Worcester area schools provide as broad a range of degree programs in continuing education as those in most other parts of the State. The depth of offerings, except in a few fields, is somewhat limited in comparison to Springfield and Boston area programs.

Although these facts reveal virtually no duplication of degree offerings, they do not necessarily imply a similarly low level of competition in terms of course enrollments of nondegree-seeking students. While complete data in this regard was not reported by several area institutions, the available information indicates a concentration of students in social sciences, business, psychology, and letters courses. On the other hand, Worcester State College's continuing education students are enrolled for the most part in graduate level education courses, with only Clark University also offering education courses. Significantly, however, the Worcester area schools offer few noncredit special interest courses, the kind of programs generally categorized as community service. This function appears to be filled mostly by the large, active and highly publicized adult education program of the Worcester Public Schools. Offering a wide variety of avocational, arts and crafts, and special interest programs in several locations at low cost to Worcester residents, this program has seemingly taken firm control over the so-called community service function. An enrollment of over 11,000 in 1972-73 general adult education courses attests to that.

It is difficult to assess the effect of the Worcester Consortium's cross-registration program on continuing studies, largely because of the lack of data on this subject. One indication that such cross-registration is limited comes from Quinsigamond, which reported that only 22 of its evening students were taking courses at Consortium schools. Only nine students from these institutions were attending Quinsigamond courses on this basis. (This brief overview is incomplete--important detailed analysis of program and course competition is in the text and charts for this area.)

Fitchburg/Gardner area: The two area institutions - Fitchburg State and Mount Wachusett Community College - do not offer competitive degree programs. The scope of their offerings, however, is somewhat limited in comparison to more densely populated areas of the state. The bulk of Fitchburg's students are enrolled in education courses; the largest single program at Mt. Wachusett is in general studies, although a large number of students are enrolled in various occupational programs (business, technologies, law enforcement, and fire science). (This brief overview is incomplete--important detailed analysis of program and course competition is in the text and charts for this area.)

Framingham area: Framingham State's primary focus is on graduate courses in education, although a new, unique external bachelor's degree in liberal arts was started in February (with planning under way for other such degrees in law enforcement, social work, urban studies, business, and environmental health). Northeastern University has long operated a branch campus in Framingham; the two area institutions, while they do not offer competitive degree programs, compete for students in several subject fields. (See the trend chart data reported elsewhere to clarify the effect of the competition.) Associate level degree opportunities in the area are quire limited. (This brief overview is incomplete--important detailed analysis of program and course competition is in the text and charts for this area.)

Lynn/Salem area: The two area institutions--Salem State and North Shore Community College--offer a wide variety of academic, occupational and noncredit offerings. Salem State offers a range of degrees at the B.A. and graduate level in numerous program fields, particularly education, and is planning an open college general studies B.A. degree using nontraditional learning methods. North Shore Community College offers extensive occupational and noncredit programs. Competition is intense in this area with Northeastern's Lynn campus and with programs at proprietary institutions and adult education programs. (This brief overview is incomplete--important detailed analysis of program and course competition is in the text and charts for this area.)

Andover/Lowell area: This area demonstrates the possibilities for program articulation rather than competition. Lowell Tech has offered engineering programs at the associate and bachelor's levels. When Northern Essex began offering associate level programs, and drew students away, Lowell Tech expanded its bachelor's programs. In contrast, programs in business at Northern Essex, Merrimack and Lowell Tech are competitive, particularly at the associate degree level. The trend charts presented earlier clarify this severe competition. (This brief overview is incomplete--important detailed analysis of program and course competition is in the text and charts for this area.)

Burlington/Bedford area: This area has one public institution, Middlesex Community College, and the largest of the Northeastern branches in Burlington. Northeastern's course offerings in liberal arts, business, and engineering are extensive. Middlesex Community College has some competitive programs in liberal studies, law enforcement and business. Middlesex Community College offers noncredit courses in a variety of areas, but faces competition from active adult education programs in the surrounding towns. Middlesex is planning new programs in health services. (This brief overview is incomplete--important detailed analysis of program and course competition is in the text and charts for this area.)

Brockton area: A strong graduate program, primarily in education, at Bridgewater State is the dominant aspect of continuing education in this area. Other opportunities are sparse, with the exception of occupational programs at Massasoit. Associate level programs in business, nursing, technology, and public service are available. Despite the existence of a large liberal arts associate program at Massasoit, little opportunity for articulation to higher degrees is provided.

Fall River/New Bedford area: The two area institutions - Bristol Community College and Southeastern Massachusetts University - offer sizeable degree programs in business, at the associate and bachelor's levels respectively. The opportunities, especially in occupational areas, are severely limited in this service area, although some proprietary institutions tend to fill that gap. (This brief overview is incomplete--important detailed analysis of program and course competition is in the text and charts for this area.)

Falmouth/Barnstable area: The only continuing education program in the area--at Cape Cod Community College--has an extensive range of subject areas at the lower division course level. Associate degrees, however, are limited to law enforcement and liberal studies. Advanced degree opportunities are nonexistent. Mass. Maritime initiated continuing education in the fall 1972 with several courses, but no formal degree programs. It is expected, however, that the program will expand quickly and soon grant degrees. A considerable number of avocational interest courses are provided by the community service program at Cape Cod. (This brief overview is incomplete--important detailed analysis of program and course competition is in the text and charts for this area.)

Boston area: The scope of programs offered in continuing education in the Boston region is the broadest in the state. Although the region supports many large programs, competition is intense, particularly in those subjects which have seen the most duplication across the state: education and business and management. In terms of both program size and variety of degree offerings, the area is dominated by the large continuing education programs at Northeastern University (Lincoln and University Colleges), accounting for 38% of the area's continuing studies students. Large programs are also provided by several other private institutions. Proprietary and independent institutions and adult education centers are numerous and often large. Course competition between the former group and colleges and universities is strongest in the areas of business and technology. Competition and duplication at both the program and individual course level promises to become even more severe as Bunker Hill and Roxbury Community Colleges open continuing education programs and as U./Mass.-Boston continues its policy of increasing substantially part-time enrollment in its full-time programs and courses. (This brief overview is incomplete--important detailed analysis of program and course competition is in the text and charts for this area.)

Part-time Study in Regular Full-time Programs

As discussed earlier, access is the significant factor in assessing part-time study opportunities in full-time programs. Part-time students account for a small percentage of the total group being examined by this study, numbering roughly 19,000 statewide. Many of them are also in graduate programs which are similar to continuing education at the state colleges, rather than part-time within a regular full-time academic program.

Variations in the access policies which define the nature of part-time study in Massachusetts are minimal. With few exceptions, these policies can be summarized as:

1) All full-time courses of instruction are open to part-time students.

2) The same admissions standards apply to full-time and part-time matriculated degree candidates.

3) Schools that allow part-time study on a nonmatriculated basis allow part-time students to enroll on a space-available basis without formal admissions requirements.

4) Costs charged for part-time students at private schools are calculated based on prorated semester tuition rates. Public institutions charge on per credit hour or course basis that generally results in a higher cost per course for part-time than full-time students.

5) Little or no financial aid or special services (such as counseling and advising) are provided for part-time students.

6) Most programs in the full-time program are only available in the day time, which limits the part-time study opportunities to those who are free to take courses during those hours.

7) Although most schools accept CLEP examination credits (up to 30 credit hours), few offer or plan to offer such external learning devices as credit for experience.

8) Most proprietary and independent schools offer programs that do not lend themselves to part-time study, with the exception of special evening or continuing education programs.

Specially-designed part-time programs available at Massachusetts colleges and universities include: U./Mass.-Amherst's Pittsfield MBA program; Extended Learning Program at Worcester State; MBA in management at Clark University; and a new degree program for prisoners at U./Mass.-Boston. Graduate programs at Northeastern, Boston College, Suffolk, Babson, and Boston University enroll large numbers of part-time students. U./Mass.-Boston and Lowell State have no continuing education programs per se, but include all part-time students in their full-time programs.

II.C.1. Program Inventory Tables: An Explanation

Continuing Education

To assess the scope and comprehensiveness of the programs offered in continuing education, two sets of regional inventory tables have been developed. On of these depicts the kinds of programs available in Fall 1972 by subject using a modified form of the HEGIS (Higher Education General Information Survey) classification system. The other is an examination of selected characteristics of each degree program.

Included in the inventory are courses of study leading to associate, bachelor's, or graduate degree; programs that offer a certificate or credit but do not lead to a regular degree; non-credit special programs (often described as community service courses); programs in which students are cross-registered from another institution; and any of the above for which a school has concrete plans to implement in the future. Where appropriate, schools are grouped into subregions of geographic proximity. It should be noted that this categorization excludes short-term conferences and workshops, even if they were administered by a division of continuing education.

In some cases, an institution failed to report in its Data Format sufficient program information. For these schools, supportive material such as catalogues and course bulletins was used. Cases in which the desired information was still unavailable are noted on the charts. In deciding how to classify various programs, priority was given to the school's own interpretation of its program. However, when sufficient evidence indicated that this interpretation was inconsistent with the formats and definitions of this study, the reported information was revised accordingly.

The characteristics examined in the detailed table are defined as follows:

a) Degree--initials of the degree awarded for successful completion of course work in this subject, as defined by the institution granting the degree.

b) Number of courses--total number of different courses offered in Fall 1972 term meeting major requirements for this degree or program.

c) Time offered--period of the day in which courses in this degree program are held, signified by the following code: m - 8 a.m. to 12 noon, Monday through Friday; a - 12 noon to 4 p.m., Monday through Friday; e - 4 p.m. to 6 p.m., Monday through Friday; n - after 6 p.m., Monday through

Friday; w - Saturday or Sunday.

d) Program Head Count -- total number of individuals enrolled in the program, as of the beginning of the Fall 1972 term.

e) FTE of the Enrolled Students -- the full-time equivalent of the number enrolled in the program, as defined by the reporting institution. This is normally calculated by dividing the aggregate number of part-time student credit hours by the institution's normal full course load.

f) Number of Matriculated Degree Candidates--number of enrolled students who are formally recognized as working toward a particular degree as defined by the reporting institution. (Note: since matriculation requirements vary widely by institution, some students who would be considered matriculated degree candidates by one school would not necessarily be so defined by another.)

g) Number of Degrees Granted (1971-72) -- total number of degrees conferred in this program during the 1971-1972 academic year.

h) Year Begun -- year in which this program or degree was first offered.

i) Occupational Programs -- programs which serve the purpose of training the student for immediate employment at the semi-professional level. This does not preclude, however, the possibility of advanced degree work upon attainment of an associate degree in an occupational program.

In summarizing the program information reported in the Data Formats, some items were excluded. General factors such as incompleteness of response and invariability by program resulted in these exclusions. Examples of the latter include: number of curriculum credits required for a degree; accreditation; fees; admission requirements; availability of cooperative programs; location; type of faculty. While these are certainly factors in any examination of program scope and comprehensiveness, data was particularly hard to obtain. Further, they lend themselves to consideration on a broader scale than that provided in a program-by-program breakdown. In addition, some of these factors will be discussed more directly in other sections of this study. The aim of these tables is to highlight the variables which have a direct effect on program scope, and which do indeed vary by program.

Since community service courses usually vary considerably from one year to the next, it was unnecessary to provide detailed information about them. Those offered in fall 1972 are inventoried as non-credit special programs on the basic program table.

Finally, courses are often available for credit in a particular subject even though no such degree is available. In each regional table, continuing education course registrations are compiled by subject fields. The classification system is a modified form of that used in the Higher Education General Information Survey (HEGIS). Institutions were asked to classify their courses in conformity to this system; in cases where that was not done, course listings were placed in their appropriate categories.

Several schools did not report this data. These are generally indicated by "NR" (not reported) at the top of a column. Wherever possible, this missing data was sought from sources such as catalogues or course listings published by the institution. These cases are marked by an asterisk (*), indicating that an unspecified number of courses are available in that subject.

Noncredit course registrations are included in the subject total. They are also indicated by the numbers in parentheses following the number of registrations. Noncredit avocational interest course registrations are generally excluded from the totals.

NOTE: Geographic service areas within each region are shown by heavy dividing lines. Institutions within the same geographic service area serve the same students. (See Section II.A for explanation.)

II.C.2. - Western Region

Discussion: Program Inventory Tables

Springfield Area
Pittsfield/North Adams Area
Amherst/Northampton Area

Table: Inventory of Programs Offered Fall, 1972 in Continuing Studies, by Subject and Institution

Table: Selected Characteristics of Continuing Education Programs Offered Fall, 1972

Table: Course Registrations in Continuing Education, Programs Offered Fall, 1972, by Subject

Discussion: Western Region Continuing Education Program Inventory Tables

The scope of programs offered in this region is one of the broadest in the state. This is partly a function of intensive competition among a variety of state colleges, community colleges, private colleges, the University of Massachusetts. One central focus of this mixture of institutions occurs in the Springfield area, where two community colleges (Holyoke and Springfield Tech), three private colleges (American International, Western New England, and Springfield) and a state college (Westfield) have been vying for their share of the area's educational market.

A natural barrier--the Berkshire Mountains--separates the highly competitive Springfield area schools from the extreme Western portion of the region. In continuing education programs largely dependent upon the commuting student, such physical obstacles tend to define the limits of an institution's potential service area. Thus Berkshire Community College and North Adams State are isolated, in competitive terms, from the Springfield area schools across the Berkshires.

Another distinct facet of the region is the area north of Springfield. Both the University of Massachusetts at Amherst and Greenfield Community College draw upon students in this subregion for their continuing education programs.

Placed on top of this amalgam of colleges and universities is a "system" of public adult education programs and vocational schools competing for another portion of the postsecondary adult learning force. The sorting out all these elements, in terms of program availability and duplication, can only be accomplished on the subregional basis suggested by the geographic factors cited above. Thus, three distinct areas of the Western region will be examined here: Springfield, Pittsfield/North Adams, and Amherst/Northampton.

Springfield Area

The highly competitive nature of continuing education in the Springfield area has already been mentioned. One apparent result has been the widespread planning for new degree programs, attempts designed to tap new markets in an area already saturated with educational opportunities. Westfield State is planning ten new bachelor's degrees, most of them in fields where there are no such existing programs in the subregion. In the heavily concentrated education area, Springfield and American International Colleges are planning new master's programs; the latter school is also considering implementation of an interdisciplinary master's degree which it notes is not presently available in the area. Bay Path Junior College is planning to embark on its first degree program this year, offering an associate degree in liberal arts, child study, and mental health. Trend data (see Section II.B.) indicate that the growth of the public community colleges (Springfield Tech and Holyoke) and Westfield State College programs has caused enrollment reductions in selected fields in the presently existing private programs.

The result for program coverage is that area adults are being given a broad range, in terms of both subject and degree level, of opportunities, as the inventory chart reveals. But to what extent does that multiplicity of degree programs duplicate the area's educational resources? Three highly competitive subject areas -- education, business, and engineering technology -- can be examined to provide an answer.

In education, Westfield has the widest range of programs at both bachelor's and graduate level. American International offers the same degree in two instances: MAT in foreign languages and MEd in special education. The latter is one of Westfield's largest degree programs, and although American International did not report program enrollment data, its higher course fee ($168 versus $66 at Westfield) puts it at a competitive disadvantage. On the undergraduate level, Westfield and Springfield have divided all the speciality areas except for elementary education, where Westfield's considerably larger program clearly predominates.

While the competitive pattern in education develops along the lines of public-private institutions, two private colleges are vying for students in the field of business degrees. American International and Western New England offer identical degrees (Bachelor's in Business Administration - BBA) in accounting and management. Data for comparisons on the basis of degrees granted was not reported, but program head count statistics reveal that business students at Western New England far outnumber those at American International, by a margin of 500 to 100. In some specialized subfields, such as finance, economics, and personnel management, American International offers the only BBA. These are small programs, however, with a total enrollment of 29. Fees and matriculation requirements at the two schools are comparable. Provisions for cross-registration (which include Springfield College) are seldom utilized by continuing education students.

On the graduate level, American International and Western New England both offer an MBA degree, although matriculated enrollment in the latter school's program is more than 6 times that of American International. While both programs are given at night, Western New England also has Saturday courses in its program. Both schools operate business degree programs at Westover Air Force Base; however, they have different degree objectives. American International provides an associate, B.A., and B.S. in business administration for military personnel at the base. Western New England offers an MBA at Westover, with an annual enrollment of from 40 to 60. Although it did not report a breakdown in its Westover enrollment, American International offered 17 courses there to 294 students in fall 1972 (which includes liberal arts as well as business courses).

Two community colleges -- Holyoke and Springfield Tech -- also provide associate degree programs in accounting and business administration and management. Springfield Tech's degree, however, is largely oriented toward career employment upon completion, while Holyoke considers its associate in business programs as appropriate to both occupational and transfer aspirations. Both schools report success, in terms of enrollment and student satisfaction, with their respective programs.

The engineering field offers a different perspective through which to view program competition in the area between Holyoke and Springfield Tech Community Colleges. The latter institution offers associate degrees in a wide variety of engineering specialties, both academic and occupational. Holyoke reports that its associate programs in mechanical, electrical, and computer technologies have met with difficulties in competition with Springfield, its unrealistic curriculum requirements, the difficulty of finding job placements, and poor facilities. Springfield Tech did not report the number of technology degrees granted in 1971-72, but Holyoke awarded only 2 engineering technology degrees during that period.

In addition, Western New England operates three large bachelor's degree programs in engineering, with a total of 261 matriculated degree candidates enrolled in Fall 1972. The analysis of course registrations reveals a similar assessment of the competition and duplication in this field. Some plans to offer U/Mass upper division courses (and possibly degrees) at the Springfield Technical Community College campus have raised concerns of increased competition and duplication.

Reflecting the overall competitive picture in the Springfield subregion, the city adult education program offers no postsecondary programs. It does provide many community interest, vocational, and practical courses that supplement the degree and course offerings in the colleges and universities.

Pittsfield/North Adams Area

Degree program opportunities in this subregion fall into three major types: 1) associate programs in liberal arts and business, data processing, and engineering technologies offered at Berkshire Community College; 2) bachelor's programs in biology, business administration, education, English, mathematics, physics, chemistry, and history at North Adams State; and 3) graduate programs in education at North Adams State. From this breakdown, it is apparent that degree programs duplication is nonexistent. On a course level, however, it is conceivable that liberal arts courses at Berkshire would be competing with B.A. program courses at North Adams. Such a comparison cannot be made because Berkshire did not report course registration data in either degree programs or on a subject-by-subject basis.

Amherst/Northampton Area

This subregion is much less a unified, discrete unit than are the others. The two institution in the area, U./Mass.-Amherst and Greenfield Community College, offer no duplicative degree programs. The course competition in the area, however, might reveal some degree of competition between them. On the noncredit program level, in fact, both have a broad range of offerings.

U./Mass.'s major degree offerings in continuing education are in education: elementary (at the bachelor's level) and vocational and counseling (master's level). A new bachelor's program in general studies, with concentrations in law enforcement and fire science, will open up new, advanced opportunities for graduates of the numerous associate degree programs in the region.

Another U./Mass. program, called University Independent Study (a Xerox Corporation program), may open up new opportunities for home study. It will be a noncredit correspondence program in two fields, effective writing and small business administration. It is being developed through a consortium of 11 major state universities and the marketing assistance of a subsidiary of the Xerox Corporation. The implementation of such a home study program centered at U./Mass. would expand opportunities for adult training in the region as well as the state.

Another major function provided by U./Mass. is the sponsorship of numerous short-term conferences and workshops. The scale of the operation is unmatched in that part of the state, and offers a broad range of educational programs for numerous groups.

It is suggested that the reader review the area trend charts (Section II.B.) and accompanying text for each geographic service area. Further, the reader should review the discussion regarding the education periphery (Section II.K.) to understand competition between the core and the periphery in these areas.

BEST COPY AVAILABLE

INVENTORY OF PROGRAMS OFFERED FALL, 1972 IN CONTINUING STUDIES, BY SUBJECT AND INSTITUTION

WESTERN REGION

KEY

A-associate degree
B-bachelor's degree
G-graduate program
C-certificate
S-credit special program (no degree)
N-non-credit special program
X-cross-registered
*-planned program

						BUSINESS						EDUCATION						
		Agriculture	Architecture	Area Studies	Biological Sci.	Accounting	Banking/Finance	Business Admin.	Secretarial	Other	Communication	Computer Sci.	Elementary	Secondary	Early Childhood	Vocational	General	Other
Springfield	Holyoke C. C.					A		A			S							
	Springfield Tech C. C.																	
	American International					B	B	B G A					G				G*	N G
	Western New England					B		B G C		B								
	Springfield College												B	B			G*	
	Westfield State				B*								B G	G	G B*	B* G	G	B*
	Bay Path Jr. College																	
Amherst/ Northampton	U. Mass. - Amherst												B			G	G	
	Greenfield C. C.							A	N									N
Pittsfield/ North Adams	Berkshire C. C.																	
	North Adams State				B			B					B G					G

		ENGINEERING								HEALTH										
		Chemical	Civil	Electrical	Mechanical	Other	Fine Arts	Applied Arts	Foreign Lang.	Hospital Mgmt.	Medical Tech.	Nursing	Other	Home Economics	Child Care	Letters (Arts & Sci)	English	Philosophy	Library Sci.	Law
Springfield	Holyoke C. C.					A					A					A				
	Springfield Tech C. C.		A			A									A					
	American International																			
	Western New England			B	B	B				B*										G
	Springfield College						B						B				B			
	Westfield State						B*		B*								B			
	*Bay Path Jr. College														A*					
Amherst/ Northampton	U. Mass. - Amherst							N											X	
	Greenfield C. C.					N	N	N			N			N		N				
Pittsfield/ North Adams	Berkshire C. C.						A									A				
	North Adams State																B			

BEST COPY AVAILABLE

INVENTORY OF PROGRAMS OFFERED FALL, 1972 IN CONTINUING STUDIES, BY SUBJECT AND INSTITUTION, cont'd.

WESTERN REGION

KEY
A-associate degree
B-bachelor's degree
G-graduate program
C-certificate
S-credit special program (no degree)
N-non-credit special program
X-cross-registered
*-planned program

							PUBLIC AFFAIRS			SOCIAL SCIENCES								INTER-DISCIPLINARY		
		Mathematics	Military Sci.	Physics	Chemistry	Psychology	Public Admin.	Social Work	Other	Economics	History	Political Sci.	Sociology	Urban Studies	Other	Community Affairs	General Studies	Liberal Arts	Other	Unclassified
Springfield	Holyoke C. C.																	A		
	Springfield Tech C. C.						A										A			
	American International			G														B	B N*	
	Western New England						B			B										
	Springfield College					B					B		B							
	Westfield State	B*				B*					B				B*	B*	B*			
	Bay Path Jr. College																	A*		
Amherst/ Northampton	U. Mass. - Amherst																B		G*	N
	Greenfield C. C.					N												A		
Pittsfield/ North Adams	Berkshire C. C.																	A		
	North Adams State	B		B	B						B									

OCCUPATIONAL PROGRAMS

KEY
Occupational Programs
A-associate degree
C-certificate or CEU
NS-non-credit special program

		BUSINESS/COMMERCE							HEALTH SERVICE						PUBLIC SERVICE			
		Accounting	Finance/Banking	Management	Marketing	Secretarial	Other	Data Processing Technology	Medical Tech.	Nursing	Other	Mechanical Engr. Technology	Environ Tech.	Food Service Tech.	Community Health	Police/Law Enforce	Fire Sci. Tech.	Other
Springfield	Holyoke C. C.			C		C	C	A				A	A	C		A		A NS
	Springfield Tech C. C.	A	A	A	A	A		A				A	A C			A	A C	
	American International																	
	Western New England						C											
	Springfield College																	
	Westfield State																	
	Bay Path Jr. College														A*			
Amherst/ Northampton	U. Mass. - Amherst			C		NS				C								
	Greenfield C. C.					NS	NS					NS A				A	A	
Pittsfield/ North Adams	Berkshire C. C.			A		A						A	A			A		
	North Adams State																	

SELECTED CHARACTERISTICS OF CONTINUING EDUCATION PROGRAMS OFFERED FALL, 1972

ASSOCIATE DEGREE PROGRAMS (academic)

WESTERN REGION

BEST COPY AVAILABLE

Subject/School	Degree	# of Courses	Time Offered	Program Head Count	FTE of Enrolled Students	# Matriculated Degree Candidates	# Degrees Granted (71-72)	Year Begun
ACCOUNTING								
Holyoke	AA	13	n	66	23	66	6	1964
BUSINESS ADMINISTRATION								
Holyoke	AA	15	n	143	46	143	27	1964
Greenfield	AS	21	n	7	5	7	6	1967
Berkshire	AA	20	n	60	25	10	2	1967
CIVIL ENGINEERING								
Springfield Tech	AS	9	n	27	6	100	—	1968
GENERAL ENGINEERING								
Holyoke	AA	6	n	17	5	17	—	1964
ENGINEERING TECH. CORE								
Springfield Tech	AS	[illegible]	n	13	3	[illegible]	—	1967
MEDICAL TECHNOLOGY								
Holyoke	AA	6	n	9	3	—	—	1964
EARLY CHILDHOOD ASST.								
Springfield Tech	AS	10	n	32	9	28	--	1970
ARTS & SCIENCES								
Holyoke	AA	18	n	269	86	269	16	1964
Berkshire	AA	20	n	40	16	5	2	1967
PUBLIC ADMINISTRATION								
Springfield Tech	AS	7	n	--	--	--	--	1972
GENERAL STUDIES								
Springfield Tech	AA	15	n	60	15	40	--	1969
LIBERAL STUDIES								
Holyoke	AA	18	n	49	16	49	4	1964
Greenfield	AA	20	n	2	5	2	3	1967
Berkshire	AA	20	n	130	50	10	2	1967

SELECTED CHARACTERISTICS OF CONTINUING EDUCATION PROGRAMS OFFERED FALL, 1972

ASSOCIATE DEGREE PROGRAMS (occupational)

WESTERN REGION

Subject/School	Degree	# of Courses	Time Offered	Program Head Count	FTE of Enrolled Students	# Matriculated Degree Candidates	# Degrees Granted (71-72)	Year Begun
ACCOUNTING								
Springfield Tech	AS	17	n	50	15	40	10	1969
BANKING & FINANCE								
Springfield Tech	AS	17	n	10	9	8	--	1971
MANAGEMENT								
Springfield Tech	AS	17	n	15	4	12	--	1970
Berkshire	AA	20	n	60	25	10	2	1967
MARKETING								
Springfield Tech	AS	17	n	12	3	--	--	1972
EXECUTIVE SECRETARY								
Springfield Tech	AS	14	n	NR	NR	NR	NR	1968
DATA PROCESSING								
Holyoke	AS	10	n	12	4	--	--	1967
Springfield Tech	AS	15	n	35	11	25	4	1967
ELECTRICAL TECHNOLOGY								
Springfield Tech	AS	9	n	18	5	12	--	1967
ELECTRONIC TECHNOLOGY								
Springfield Tech	AS	13	n	60	18	50	12	1967
ENGINEERING TECHNOLOGY								
Springfield Tech	AS	9	n	--	--	--	--	1967
Berkshire	AA	22	m;n	10	4	10	3	1967
MACHINE & TOOL DESIGN								
Springfield Tech	AS	12	n	15	4	12	7	1967
MECHANICAL TECHNOLOGY								
Springfield Tech	AS	11	n	12	3	10	6	1967
BASIC ENGINEERING TECH.								
Holyoke	AS	9	n	20	6	20	2	1964
INDUSTRIAL ENGINEERING TECHNOLOGY								
Greenfield	AS	18	n	2	1	2	3	1969
ENVIRONMENTAL TECHNOLOGY								
Holyoke	AS	6	n	1	--	--	--	1971
Springfield Tech	AS	9	n	15	3	--	--	1971
LAW ENFORCEMENT								
Holyoke	AS	10	n	249	79	249	33	1968
Springfield Tech	AS	15	n	295	98	295	45	1968
Greenfield	AS	19	n	22	5	22	2	1969
Berkshire	AS	20	m;n	50	20	50	10	1968
FIRE SCIENCE TECHNOLOGY								
Springfield Tech	AS	13	n	195	65	195	17	1967
Greenfield	AS	19	n	2	1	2	2	1969
EARLY CHILDHOOD								
Holyoke	AS	8	n	24	8	24	--	1970

SELECTED CHARACTERISTICS OF CONTINUING EDUCATION PROGRAMS OFFERED FALL, 1972

BACHELOR'S DEGREE PROGRAMS

BEST COPY AVAILABLE

WESTERN REGION

Subject/School	Degree	# of Courses	Time Offered	Program Head Count	FTE of Enrolled Students	# Matriculated Degree Candidates	# Degrees Granted (71-72)	Year Begun
BIOLOGY								
North Adams State	BA	1	W 6:15	--	--	--	--	1962
ACCOUNTING								
American International	BBA	NR	n	30	NR	30	NR	1940
Western New England	BBA	9	n	124	41	124	9	1931
FINANCE								
American International	BBA	NR	n	7	NR	7	NR	1968
ECONOMICS								
American International	BBA	NR	n	4	NR	4	NR	1968
MANAGEMENT								
American International	BBA	NR	n	13	NR	13	NR	1968
Western New England	BBA	8	n	258	86	258	18	1931
North Adams State	BS	8	e;n	40*	18	40	—	1971
MANAGEMENT-REAL ESTATE								
Western New England	BBA	10	n	13	4	13	3	1962
MARKETING								
Western New England	BBA	3	n	45	15	45	7	1963
ENGINEERING & MANAGEMENT								
Western New England	BBA	16	n	60	20	60	2	1936
PERSONNEL MANAGEMENT								
American International	BBA	NR	n	18	NR	18	NR	1968
GENERAL BUSINESS								
American International	BBA	NR	n	28	NR	28	NR	1940
ELEMENTARY EDUCATION								
Springfield College	BA	1	NR	NR	NR	NR	NR	NR
Westfield State[a]	BSE	30/30	n	60/86[b]	21/30[b]	25/26	7	1958
U. Mass-Amherst[c]	BA	27	NR	298	215	298	6	1971
Malcolm X	BA	NR	NR	46	NR	46	--	1972
Concord	BA-MA	4		98	20	NR	--	1972
North Adams State	BS	7	e;n	24	15	24	6	1937
SECONDARY EDUCATION								
Springfield College	BA	3	n	NR	NR	NR	NR	NR

[a] Two BSE degrees offered, for grades K-3 and for grades 4-6.

[b] Estimates by Westfield.

*Business Administration at North Adams State

[c] Career Opportunities Program

BEST COPY AVAILABLE

SELECTED CHARACTERISTICS OF CONTINUING EDUCATION PROGRAMS OFFERED FALL, 1972

BACHELOR'S DEGREE PROGRAMS, cont'd.

WESTERN REGION

Subject/School	Degree	# of Courses	Time Offered	Program Head Count	FTE of Enrolled Students	# Matriculated Degree Candidates	# Degrees Granted (71-72)	Year Begun
OCCUPATIONAL EDUCATION								
Westfield State	BSE	34	e	44^d	19^d	14	18	1961
ELECTRICAL ENGINEERING								
Western New England	BSEE	8	e	86	39	86	13	1956
MECHANICAL ENGINEERING								
Western New England	BSME	9	e	123	41	123	17	1956
INDUSTRIAL ENGINEERING								
Western New England	BSIE	3	e	53	18	53	14	1956
ART IN URBAN LIFE								
Springfield College	BA	1	e	———no information reported———				
REHABILITATION SERVICES								
Springfield College	BA	1	e	———no information reported———				
ENGLISH								
Springfield College	BA	2	e	———no information reported———				
Westfield State	BA	26	e	83^d	19^d	22	1	1970
North Adams State	BA	4	e	[illegible]	7	11	4	1962
MATHEMATICS								
North Adams State	BA	3	e/n	14	6	14	3	1962
PHYSICS								
North Adams State	BS	3	e	18	10	18	6	1962
CHEMISTRY								
North Adams State	BS	1	e	3	2	3	2	1962
PSYCHOLOGY								
Springfield College	BS	4	e	------no information reported---------				
LAW ENFORCEMENT								
Western New England	BS	3	e	46	15	46	—	1971
U. Mass-Amherst	BGS	1	NR	10	3	—	1	1972
FIRE SCIENCE								
U. Mass-Amherst	BGS	1	NR	10	3	--	--	1972
HISTORY								
Springfield College	BA	2	e	------no information reported---------				
Westfield State	BA	25	e/n	38^e	13^e	16	—	1970
North Adams State	BA	3	e/n	9	5	9	3	1962
SOCIOLOGY-ANTHROPOLOGY								
Springfield College	BA	3	e	-------no information reported---------				
COMMUNITY LEADERSHIP								
Springfield College	BA	1	e	------no information reported---------				
INTERDISCIPLINARY SOCIAL SCIENCE								
American International	BA	NR	NR	NR	[illegible]	14	NR	1960
LIBERAL STUDIES								
American International	BA	NR	NR	NR	NR	18	NR	1970

[d] Estimated by Westfield

[e] Estimated by Westfield

SELECTED CHARACTERISTICS OF CONTINUING EDUCATION PROGRAMS OFFERED FALL, 1972

GRADUATE DEGREE PROGRAMS

WESTERN REGION

BEST COPY AVAILABLE

Subject/School	Degree	# of Centers	Time Offered	Program Head Count	FTE of Enrolled Students	# Matriculated Degree Candidates	# Degrees Granted (71-72)	Year Begun
BUSINESS ADMINISTRATION								
American International	MBA	7	n	NR	NR	99	NR	1953
Western New England	MBA	21	n/w	634	300	634	300	1956
EDUCATION								
ELEMENTARY								
American International	MEd		d/n	no information reported				
North Adams State	MEd	7	n	33	11	33	9	1937
ELEMENTARY SCHOOL ADMIN.								
Westfield State	MEd	6	n	70*	35*	33	4	1968
SECONDARY								
Westfield State	MEd	8	n	19*	7*	6	1	1971
SECONDARY SCHOOL ADMIN.								
Westfield State	MEd	9	n	70*	20*	33	10	1968
EARLY CHILDHOOD								
Westfield State	MEd	7	n	121*	42*	38	9	1968
VOCATIONAL								
Westfield State	MEd	4	p	22*	8*	7	2	1970
U. Mass-Amherst	MA	2	NR	34	11	11	—	1971
URBAN								
Westfield State	MEd	2	NR	24	12	24	—	1972
SPECIAL								
Westfield State	MEd	6	n	70*	35*	33	5	1968
American International	MEd		d/n	no information reported				
ADMINISTRATION								
North Adams State	MEd	3	n	39	15	39	19	1937

*Estimated by Westfield

BEST COPY AVAILABLE

SELECTED CHARACTERISTICS OF CONTINUING EDUCATION PROGRAMS OFFERED FALL, 1972

GRADUATE DEGREE PROGRAMS, cont'd.

WESTERN REGION

Subject/School	Degree	# of Courses	Time Offered	Program Head Count	FTE of Enrolled Students	# Matriculated Degree Candidates	# Degrees Granted (71-72)	Year Begun
COUNSELING & GUIDANCE								
Westfield State	MEd	14	e;n	275*	96*	86	25	1968
U. Mass-Amherst	MA	NR	NR	35	12	35	--	1971
North Adams State	MEd	3	e;n	54	19	54	15	1937
READING								
Westfield State	MEd	8	e	192*	67*	60	15	1968
SCHOOL PSYCHOLOGY								
Westfield State	MEd	9	e;n	64*	22*	20	5	1968
ENGLISH								
Westfield State	MEd	6	n	112*	39*	35	16	1968
North Adams	MEd	2	n	21	8	21	6	1937
HISTORY								
Westfield State	MEd	5	n	26*	9*	8	5	1968
North Adams	MEd	2	n	15	5	15	5	1937
MATHEMATICS								
Westfield State	MEd	11	n	22*	8*	7	—	1968
North Adams	MEd	2	n	14	4	14	1	1937
FOREIGN LANGUAGES								
American International	MAT	24	n	NR	NR	48	NR	1971
Westfield State	MAT	5	n	10*	4*	3	--	1968
PHYSICS								
North Adams	MEd	2	n	5	2	5	--	1937
LAW								
Western New England	JD	24	n	426	142	426	29	1919
PHYSICS								
American International	MST	5	e	NR	NR	32	NR	1968

*Estimated by Westfield

COURSE REGISTRATIONS IN CONTINUING EDUCATION PROGRAMS OFFERED FALL, 1972, BY SUBJECT

REGION: WESTERN

BEST COPY AVAILABLE

	HOLYOKE	SPRINGFIELD TECH	AMERICAN INTNL.	WESTERN N. E.	SPRINGFIELD	WESTFIELD	U. MASS - AM.	GREENFIELD	BERKSHIRE	NORTH ADAMS STATE
demic Fields of Study										
Agriculture							60			
Architecture							1		*	
Area Studies										
Biological Sciences	*	*	31			27		7	*	12
Business/Management	235	246	1287	1646			86	92		134(2)
Communications							20			
Computer/Info. Sciences			16	118				16		17
Education	29		355			842(18)				525
Engineering				364					*	
Fine & Applied Arts	(50)	*	26		9		37		*	32
Foreign Languages		*	22		18	36(9)	30	13	*	
Health Professions										
Home Economics										
Letters (Arts & Sciences)	264	505	117	101	28	239(1)	74	77	*	138
Library Science										
Mathematics	*	*	22	194		77(1)	22		*	63
Military Sciences										
Physical Sciences	*	*	45	117		31	54		*	46
Psychology	*	*	81	34	54	494(3)	4	91	*	41
Public Affairs & Services				1624[a]	5					
Social Sciences	*	*	159	214	134	130(1)	111	150	*	117
Civic & Community Affairs										
Interdisciplinary Studies	130									
Other Fields										
upational Fields of Study										
Data Processing Tech.	12	72							*	
Health Services Tech.	16									66
Mechanical & Engineering Technologies	37	148								
Natural Science Tech.		3								
Business & Commerce Tech.	48	84							*	
Public Service Related Technologies										
-Law Enforcement	229	291				81(1)			*	
-Fire Science		319						19		

[a] 1586 of these are registrations in law school courses

* Courses offered in this field of study. Fall 1972 course registrations were not reported.

II.C.2. - Central Region

Discussion: Program Inventory Tables

Worcester Area
Fitchburg/Gardner Area
Framingham Area

Table: Inventory of Programs Offered Fall, 1972 in Continuing Studies, by Subject and Institution

Table: Selected Characteristics of Continuing Education Programs Offered Fall, 1972

Table: Course Registrations in Continuing Education, Programs Offered Fall, 1972, by Subject

Discussion: Central Region Continuing Education Program Inventory Tables

In looking at program scope and comprehensiveness in the Central region, it is useful to separate, for special attention, the schools in the Worcester area. Two public institutions (Quinsigamond Community College and Worcester State College) and four private ones (Anna Maria College, Assumption College, Clark University, and Worcester Polytechnic Institute) provide evening degree programs through separate divisions. Though tied cooperatively in some sense through the Worcester Consortium for Higher Education, these schools generally perceive the continuing education atmosphere as one of considerable competition. In other parts of the region, Mt. Wachusett Community College and Framingham State College experience a different sort of competitive pressure: the former from local adult education and technical-vocational programs, and the latter, as it seeks to expand its offerings into other fields, from the Northeastern University branch in Framingham. Unique in the region is Fitchburg State College, which is at least thirty miles from any perceived competitor.

In view of these differing situations, each geographic service area will be discussed in turn.

Worcester Area

Despite the high concentration of continuing education programs, duplication - in terms of degree programs - is minimal. Quinsigamond offers the only associate degree, in business administration, liberal arts, and several occupational programs. Worcester State has a monopoly on graduate programs in education, although they have been under a moratorium on these degrees pending further study. Should these be no longer offered, no graduate programs in this field would be available in the Worcester area. Similarly, Worcester Polytechnic (W.P.I.) provides the only available graduate degrees in business, engineering, mathematics, and physics.

Anna Maria College has only one continuing studies degree program - a B.S. in Health Studies designed for nurses that was instituted in 1972. It is the only such program available. Similarly, Clark University and Assumption College offer bachelor's degrees in non-duplicative fields. The only severe duplicative and competitive situation exists between the associate degree programs in business and liberal studies at Quinsigamond and Worcester Junior College. The latter's programs have suffered greatly following introduction of parallel degrees at Quinsigamond.

From the standpoint of a student seeking a particular degree in a particular field in the Worcester area, the choice is clear. The sole determinant in general is which school offers it. In terms of scope of offerings, the Worcester area schools provide as a broad a range of degree programs in continuing education as those in any part of the state, as the inventory reveals.

Although these facts (excepting the Quinsigamond-Worcester Junior College problem) reveal no duplication of degree offerings, there is severe competition on the level of course enrollments of degree and non-degree-seeking students. The competition is most intense at the level of lower division courses. Quinsigamond Community College particularly appears to have drawn many students who would previously have gone to one of the other institutions. The private institutions keenly perceive this competition and enrollment trends bear out the point. With a planned expansion of undergraduate programs and courses at Worcester State, this public/private competition should become even more severe. U./Mass.-Amherst has manifested interest in the Worcester market by offering a few courses there in the past. The future of such efforts is unclear.

Significantly, the Worcester area schools offer few noncredit, special interest courses, the kind of programs generally categorized as community service. This function appears to be filled largely by the active and highly publicized adult education program of the Worcester Public Schools. Offering a wide variety of avocational, arts and crafts, and special interest programs in several locations at low cost to Worcester residents, this program has seemingly taken firm control over the so-called community service function. An enrollment of over 11,000 in 1972-73 general adult education courses is evidence of its reach into the community.

It is difficult to assess the effect of the Consortium's cross-registration program on continuing studies, largely because of the lack of data on this subject. One indication that such cross-registration is limited comes from Quinsigamond, which reported that only 22 of its evening students were taking courses at Consortium schools. Only nine students from these institutions were attending Quinsigamond courses on this basis.

Fitchburg/Gardner Area

As noted above, Fitchburg State is uniquely located at a considerable commuting distance from any competitive continuing studies institutions. Even if that were not the case, Fitchburg offers several unique masters programs in education - vocational, industrial and special.

Although it is located nearby, Mt. Wachusett Community College does not offer any degree programs that compete with Fitchburg. Its largest programs are associate degree occupational courses in business technology, law enforcement, and fire science. In the latter two areas, both Mt. Wachusett and Quinsigamond have associate programs which cannot be seen as duplicative, because the distance between the two schools forces them to draw upon clientele groups from different geographic areas.

Framingham Area

Framingham State's continuing education has been generally limited to graduate programs in education, though plans to expand into various undergraduate studies are being implemented. In view of the moratorium on graduate programs at Worcester State, and the distance to both Worcester and Fitchburg from the Framingham area, these programs do not directly compete with the other education degree programs in the region. The U./Mass. Branch Campus recently opened at Concord/Carlisle high school, however, appears duplicative of the Framingham State offerings, and the latter believes the competition unwarranted. A new external bachelor's degree program in liberal arts at Framingham, started in February 1973, is unique in the region. Should implementation of other external degrees in law enforcement, social work, urban studies, business, and environmental health develop by 1975 as planned, the scope of the Central region programs will be greatly expanded without unnecessary duplication.

Although it does not appear on the inventory chart for the region, Northeastern University operates a University College branch at Framingham North High School with a 1972 enrollment of 1738. (About 60 students are also enrolled in Lincoln College courses in Framingham.) However, Northeastern does not currently offer any of the same degrees as Framingham State. Competition in courses and special program studies is becoming a problem, however, as, for example, Framingham institutes a law enforcement program in competition with Northeastern's.

In terms of program comprehensiveness in the Central region, it has already been noted in the case of the Worcester area, that few of the colleges and universities provide noncredit, community service courses. This is, in part, a reflection of the level of activity in local adult education programs. A similar situation exists in other parts of the region.

It is suggested that the reader review the area trend charts (Section II.B.) and accompanying text for each geographic service area. Further, the reader should review the discussion regarding the education periphery (Section II.K.) to understand competition between the core and periphery in these areas.

INVENTORY OF PROGRAMS OFFERED FALL, 1972 IN CONTINUING STUDIES, BY SUBJECT AND INSTITUTION

CENTRAL REGION

BEST COPY AVAILABLE

KEY
A-associate degree
B-bachelor's degree
G-graduate program
C-certificate
S-credit special program (no degree)
N-non-credit special program
X-cross-registered
*-planned program

						BUSINESS						EDUCATION					
		Agriculture	Architecture	Area Studies	Biological Sci.	Accounting	Banking/Finance	Business Admin.	Secretarial	Other	Communication	Computer Sci.	Elementary	Secondary	Early Childhood	Vocational	General	Other
Worcester	Quinsigamond C.C.							A										
	Assumption College																B	
	Clark University							B										
	Worcester State												G	G			G	G
	Worcester Polytech.							G				G						
	Anna Maria College																	
	Worcester Jr. Col.						A	A		C								
Fitchburg/ Gardner	Mt. Wachusett C.C.							A		A	A							A
	Fitchburg State															GC	G	G
Framingham	Framingham State												B	G			G	G

		ENGINEERING								HEALTH										
		Chemical	Civil	Electrical	Mechanical	Other	Fine Arts	Applied Arts	Foreign Lang.	Hospital Mgmt.	Medical Tech.	Nursing	Other	Home Economics	Child Care	Letters (Arts & Sci)	English	Philosophy	Library Sci.	Law
Worcester	Quinsigamond C.C.																			
	Assumption College								B								B			
	Clark University						B													
	Worcester State																			
	Worcester Polytech.			G	G															
	Anna Maria College												B							
	Worcester Jr. Col.		A	A	A	A														
Fitchburg/ Gardner	Mt. Wachusett C.C.				N		A	N												
	Fitchburg State																			
Framingham	Framingham State													G						

INVENTORY OF PROGRAMS OFFERED FALL, 1972 IN CONTINUING STUDIES, BY SUBJECT AND INSTITUTION, cont'd.

CENTRAL REGION

BEST COPY AVAILABLE

KEY

A-associate degree
B-bachelor's degree
G-graduate program
C-certificate
S-credit special program (no degree)
N-non-credit special program
X-cross-registered
*-planned program

							PUBLIC AFFAIRS			SOCIAL SCIENCES							INTER-DISCIPLINARY		
		Mathematics	Military Sci.	Physics	Chemistry	Psychology	Public Admin.	Social Work	Other	Economics	History	Political Sci.	Sociology	Urban Studies	Other	Community Affairs	General Studies	Liberal Arts	Other	Unclassified
Worcester	Quinsigamond C.C.																A	A		
	Assumption College							B			B		B							
	Clark University																A B			
	Worcester State																			
	Worcester Polytech	G		G																
	Anna Maria College																			
	Worcester Jr. Col.																	A		
Fitchburg/Gardner	Mt. Wachusett C.C.																A	A		
	Fitchburg State																			
Framingham	Framingham State																	B*		

KEY

Occupational Programs
A-associate degree
C-certificate or CEU
NS-non-credit special program

		OCCUPATIONAL PROGRAMS																
		BUSINESS/COMMERCE							HEALTH SERVICE							PUBLIC SERVICE		
		Accounting	Finance/Banking	Management	Marketing	Secretarial	Other	Data Processing Technology	Medical Tech.	Nursing	Other	Mechanical Engr. Technology	Environ Tech.	Food Service Tech.	Community Health	Police/Law Enforce	Fire Sci. Tech.	Other
Worcester	Quinsigamond C.C.					A			A		A		A			A	A	A
	Assumption College																	
	Clark University																	
	Worcester State																	
	Worcester Polytech.			C														
	Anna Maria College																	
	Worcester Jr. Col.											B						
Fitchburg/Gardner	Mt. Wachusett C.C.					A	A C	A				A			A	A	A	
	Fitchburg State																	
Framingham	Framingham State																	

BEST COPY AVAILABLE

SELECTED CHARACTERISTICS OF CONTINUING EDUCATION PROGRAMS OFFERED FALL, 1972

ASSOCIATE DEGREE PROGRAMS (academic)

CENTRAL REGION

Subject/School	Degree	# of Courses	Time Offered	Program Head Count	FTE of Enrolled Students	# Matriculated Degree Candidates	# Degrees Granted (71-72)	Year Begun
BUSINESS ADMINISTRATION								
Quinsigamond	AA	13	n	303	101	109	37	1963
Worcester Jr. Col.	AA	NR	n	196	85	196	41[a]	NP
Mt. Wachusett	AS	9	n	47	20	2	3	1965
INDUSTRIAL MANAGEMENT								
Worcester Jr. Col.	AA	NR	n	24	10	24	41[a]	NP
Mt. Wachusett	AS	11	n	18	8	--	--	1969
BANKING								
Worcester Jr. Col	AA	NR	n	24	10	24	41[a]	NR
ACCOUNTING								
Worcester Jr. Col.	AA	NR	n	18	8	18	41[a]	NR
PUBLIC COMMUNICATIONS								
Mt. Wachusett	AS	4	n	--	--	--	--	1970
BUSINESS EDUCATION								
Mt. Wachusett	AS	10	n	3	1	--	--	1970
ENGINEERING								
GENERAL								
Worcester Jr. Col.	AE	NR	n	79	35	79	44[b]	NR
CIVIL								
Worcester Jr. Col.	AE	NR	n	18	8	18	44[b]	NR
ELECTRICAL								
Worcester Jr. Col.	AE	NR	n	58	25	58	44[b]	NR
INDUSTRIAL								
Worcester Jr. Col.	AE	NR	n	26	12	26	44[b]	NR
MECHANICAL								
Worcester Jr. Col.	AE	NR	n	56	24	56	44[b]	NR
FINE AND APPLIED ARTS								
Mt. Wachusett	AA	7	n	4	1	--	--	1970
GENERAL STUDIES								
Mt. Wachusett	AS	3	n	124	47	5	7	1965
LIBERAL ARTS								
Quinsigamond	AA	19	n	1472	491	108	142	1963
Worcester Jr. Col.	AA	NR	n	57	25	57	5	NR
Mt. Wachusett	AA	9	n	27	11	--	--	1965

[a] Includes all associate degrees in business

[b] Includes all associate degrees in engineering

BEST COPY AVAILABLE

SELECTED CHARACTERISTICS OF CONTINUING EDUCATION PROGRAMS OFFERED FALL, 1972

ASSOCIATE DEGREE PROGRAMS (occupational)

CENTRAL REGION

Subject/School	Degree	# of Courses	Time Offered	Program Head Count	FTE of Enrolled Students	# Matriculated Degree Candidates	# Degrees Granted (71-72)	Year Begun
SECRETARIAL STUDIES								
Quinsigamond	AA	5	n	62	20	17	40	1963
Mt. Wachusett	AS	7	n	5	2	--	--	1965
BUSINESS TECHNOLOGY								
Mt. Wachusett	AS	10	n	46	22	1	--	1965
DATA PROCESSING TECHNOLOGY								
Mt. Wachusett	AS	8	n	13	6	--	--	1968
OCCUPATIONAL THERAPY								
Quinsigamond	AA	2	n	47	16	5	--	1971
ENGINEERING TECHNOLOGY								
Mt. Wachusett	AS	6	n	7	3	--	--	1965
ELECTRONIC ENGINEERING TECHNOLOGY								
Mt. Wachusett	AS	6	n	20	10	--	--	1969
MECHANICAL ENGINEERING								
Mt. Wachusett	AS	7	n	13	5	2	2	1969
PLASTICS TECHNOLOGY								
Mt. Wachusett	AS	6	n	1	1	--	--	1971
ENVIRONMENTAL HEALTH								
Quinsigamond	AA	3	e	28	9	15	2	1970
COMMUNITY MENTAL HEALTH TECHNOLOGY								
Mt. Wachusett	AS	8	n	16	6	--	--	1970
EARLY CHILDHOOD ASSISTANT								
Quinsigamond	AA	4	m;e	59	20	50	7	1968
LAW ENFORCEMENT								
Quinsigamond	AA	3	n	176	58	156	27	1967
Mt. Wachusett	AS	12	n	53	24	--	--	1969
FIRE SCIENCE								
Quinsigamond	AA	3	n	134	43	29	7	1968
Mt. Wachusett	AS	NR	n	33	9	--	--	1972

BEST COPY AVAILABLE

SELECTED CHARACTERISTICS OF CONTINUING EDUCATION PROGRAMS OFFERED FALL, 1972

BACHELOR'S DEGREE PROGRAMS

CENTRAL REGION

Subject/School	Degree	# of Courses	Time Offered	Program Head Count	FTE of Enrolled Students	# Matriculated Degree Candidates	# Degrees Granted (71-72)	Year Begun
BUSINESS ADMINISTRATION Clark	BS	15	n;w	266	13	266	47	1953
VOCATIONAL EDUCATION Fitchburg State	BS	46	e;n	368	277	300	34	1935
GENERAL EDUCATION Assumption	BA	9	e;n	38	13	38	16	1954
ENGINEERING TECHNOLOGY Central N.E. College	BS	NR	n	128	64	128	4	NR
FINE ARTS Clark	BFA	4	e;n;w*	20	1	20	11	1966
FRENCH Assumption	BA	5	e;n	2	1	2	2	1954
HEALTH STUDIES Anna Maria	BS	14	m;a;e	52	31	52	--	1972
ENGLISH Assumption	BA	4	n	2	1	2	1	1954
REHABILITATION COUNSELING Assumption	BA	2	a;e;n	3	1	3	--	1969
HISTORY Assumption	BA	2	n	2	1	1	--	1954
SOCIOLOGY Assumption	BA	--	NR	1	--	1	1	1961
GENERAL STUDIES Clark	BS	17	n;w	181	14	181	47	1953

*in conjunction with Worcester Art Museum. All courses are offered there.

BEST COPY AVAILABLE

SELECTED CHARACTERISTICS OF CONTINUING EDUCATION PROGRAMS OFFERED FALL, 1972

GRADUATE DEGREE PROGRAMS

CENTRAL REGION

Subject/School	Degree	# of Courses	Time Offered	Program Head Count	FTE of Enrolled Students	# Matriculated Degree Candidates	# Degrees Granted (71-72)	Year Begun
BUSINESS AND MANAGEMENT								
Worcester Polytech	MS	4	n	80	25	80	--	1971
COMPUTER SCIENCE								
Worcester Polytech	MS	NR	e;n	96	24	96	8	NR
EDUCATION								
ELEMENTARY								
Worcester State	MEd	15	e;n	327	NR	216	77	1963
Framingham State								
Curriculum	MEd	17	n	8	9	11	20	1970
Math	MEd	8	n	7	5	7	1	1968
Soc. Studies	MEd	11	n	6	4	6	8	1968
SECONDARY								
Worcester State	MEd	6	e;n	89	NR	51	10	1963
Framingham State								
Biology	MEd	10	n	9	6	9	13	1970
English	MEd	9	n	14	9	14	10	1966
History	MEd	8	n	6	3-1/2	6	13	1968
Home Ec.	MEd	9	n	20	12-1/2	20	9	1967
Math	MEd	6	e;n	12	8	12	6	1970
Science	MEd	9	n	1	1/2	1	2	1970
INDUSTRIAL								
Fitchburg State	MEd	5	e;n	83	28	30	15	1969
OCCUPATIONAL								
Fitchburg State	MEd	10	n;w	53	24	--	--	1972
SPECIAL								
Fitchburg State	MEd	6	e;n	213	81	50	10	1954
ADMINISTRATION								
Worcester State	MEd	4	e;n	104	NR	59	34	1963
Fitchburg State	MEd	6	a;e;n	81	31	47	14	1954
Framingham State	MEd	8	e;n	11	6-1/2	11	8	1970
GUIDANCE & COUNSELING								
Worcester State	MEd	6	e;n	136	NR	111	42	1963
Fitchburg State	MEd	14	a;e;n	192	64	144	20	1954
Framingham State	MEd	9	n	51	30-1/2	51	9	1970
SCHOOL PSYCHOLOGY								
Fitchburg State	MEd	14	e;n	46	14	32	1	1954
Worcester State	MEd	3	e;n	97	NR	93	--	n/a
PHILOSOPHY								
Worcester State	MEd	3	e;n	108	NR	108	--	NR
RESEARCH								
Worcester State	MEd	2	e;n	49	NR	49	--	n/a
READING								
Fitchburg State	MEd	6	a;e	109	27	36	8	1954
Framingham State	MEd	9	e;n	34	20-1/2	34	22	1970
BIOLOGY								
Worcester State	MEd	2	e;n	25	NR	17	6	1963

BEST COPY AVAILABLE

SELECTED CHARACTERISTICS OF CONTINUING EDUCATION PROGRAMS OFFERED FALL, 1972

GRADUATE DEGREE PROGRAMS, cont'd.

CENTRAL REGION

Subject/School	Degree	# of Courses	Time Offered	Program Head Count	FTE of Enrolled Students	# Matriculated Degree Candidates	# Degrees Granted (71-72)	Year Begun
EDUCATION cont'd								
COMMUNICATION								
Worcester State	MEd	2	e;n	37	NR	15	--	n/a
COMPUTER INFO. SERVICES								
Worcester State	MEd	1	e	7	NR	3	--	n/a
FINE ARTS								
Worcester State	MEd	1	e	10	NR	2	--	n/a
FOREIGN LANGUAGES								
Worcester State	MEd	1	e	10	NR	4	--	n/a
ENGLISH								
Worcester State	MEd	2	e;n	22	NR	14	3	1963
Fitchburg State	MEd	9	e;n;w	40	8	12	10	1954
	MAT	7	e;n;w	38	14	12	1	1971
MATHEMATICS								
Worcester State	MEd	1	n	10	NR	7	8	1963
LIBRARY SCIENCE								
Worcester State	MEd	3	e;n	66	NR	42	4	1970
SCIENCES								
Worcester State	MEd	2	e	21	NR	14	7	1963
Fitchburg State	MEd	8	e;n;w	95	23	31	9	1969
PSYCHOLOGY								
Worcester State	MEd	1	e	11	NR	6	--	n/a
SOCIAL SCIENCE								
Worcester State	MEd	3	e;n	49	NR	15	12	1963
Fitchburg State History	MEd	5	e;n	59	17	18	6	1954
ENGINEERING								
ELECTRICAL								
Worcester Polytech.	MS	4	e;n	7	2	7	2	NR
MECHANICAL								
Worcester Polytech.	MS	5	e;n	16	4	16	3	NR
FOOD AND NUTRITION								
Framingham State	MS	6	e;n	9	5-1/2	9	14	1970
MATHEMATICS								
Worcester Polytech	MS	2	n	1	--	1	--	NR

COURSE REGISTRATIONS IN
CONTINUING EDUCATION PROGRAMS
OFFERED FALL, 1972, BY SUBJECT

REGION: CENTRAL

	QUINSIGAMOND	ASSUMPTION	WORCESTER JR. COL.	CLARK	WORCESTER STATE	WORCESTER POLYTECH	ANNA MARIA	LEICESTER	MT. WACHUSETT	FITCHBURG STATE	FRAMINGHAM	NORTHEASTERN-
Academic Fields of Study								N.R.				
Agriculture												
Architecture												
Area Studies												
Biological Sciences	181		*	*	24		11		*	21	96(5)	
Business/Management	332		*	*		*			*			821
Communications					37				*			10[B]
Computer/Info. Sciences					7	*					36(3)	12[A]
Education				*	912				*	1647	695(12)	
Engineering			*			*			*			
Fine & Applied Arts	183	4		*	9		1		*	97	80(6) 6NC	
Foreign Languages	36	62		*			1		*		49(3) 3 NC	
Health Professions										12		
Home Economics											130(2)	
Letters (Arts & Sciences)	420	20	*	*	22		27		*	260	457(6)	187
Library Science			*		59						69(5)	
Mathematics	236				11	*			*	52	95(4)	37[A]
Military Sciences												
Physical Sciences	59		*	*	20	*	13		*	81	49(1)	8[illegible] 1[illegible]
Psychology	389	4	*	*	39				*	520	416(5)	102
Public Affairs & Services	14								*			
Social Sciences	352	46		*	52		8		*	38	363(2)	321
Civic & Community Affairs										35		
Interdisciplinary Studies	42						37					
Other Fields												
Occupational Fields of Study												
Data Processing Tech.	39									7		
Health Services Tech.	175											
Mechanical & Engineering Technologies	7											
Natural Science Tech.												
Business & Commerce Tech.	43											
Public Service Related Technologies	190											
-Law Enforcement	307								32		204[B]	
-Fire Science	184											

A - Lincoln College
B - University College

* Courses offered in this field of study.
Fall 1972 course registrations were not reported.

II.C.2. - Northeast Region

Discussion: Program Inventory Tables

Lynn/Salem Area
Andover/Lowell Area
Burlington/Bedford Area

Table: Inventory of Programs Offered Fall, 1972 in Continuing Studies, by Subject and Institution

Table: Selected Characteristics of Continuing Education Programs Offered Fall, 1972

Table: Course Registrations in Continuing Education Programs Offered Fall, 1972, by Subject

Discussion: Northeast Region Continuing Education Program Inventory Tables

An important historical factor in the Northeast region is a school located in Boston. Northeastern University, through both University and Lincoln Colleges, has operated a large branch campus in Burlington, a smaller branch in Lynn, and a third in Haverhill. The public institutions of the region at the community college and state college level and the Northeastern branches offer competitive programs. Competition with the community colleges is stiff since the latter have opened programs and courses duplicative of those already offered by Northeastern.

A wide variety of courses is offered at Burlington, especially in liberal arts, law enforcement, and business. An analysis of course registrations in the region revels the extent to which the community colleges and Northeastern's branches provide competitive courses. The extent of degree level competition is difficult to assess since students at the Northeastern branches usually complete degree requirements at the main campus in Boston. Some degrees are available at Burlington (in engineering and business at the graduate level, and liberal arts, sociology, English, history, and psychology at the undergraduate level), but the time required for completion of all requirements might be lengthy because of the less extensive course offerings there compared to the Boston campus. The relatively small number of courses at Lynn and Haverhill would make completion of various degree requirements, even at an associate level, a lengthy process. Lincoln College degrees require laboratory work, not available at the branches.

Dates of introduction of programs in the region and examination of enrollment trends following introduction of new programs (see Section II.B.) reveals the pattern of course and program offerings as developed in the region.

Two generally specialized institutions in the region provide comprehensive program coverage in their respective fields. In the area of education, Salem State College offers a range of degrees at the baccalaureate and graduate level in numerous program fields. It is, in fact, the only Northeast region school that grants degrees in continuing education; Lowell State offers only daytime degrees.

Similarly, Lowell Technological Institute covers numerous aspects of the engineering field with both associate and bachelor's degree programs. With the subsequent entry of the community colleges into engineering technology fields at the associate degree level Lowell Tech has expanded its baccalaureate programs to accommodate the increased number of associate degree holders in engineering who desired advanced study at night. Lowell Tech was able to absorb decreasing associate level enrollments into an expanded bachelor's program. This development of community colleges as feeders into both employment and higher level programs at other institutions is an example of how potential program duplication can be converted to complimentary expenditures of resources.

Unlike the engineering area, where the region's schools have succeeded in broadening program coverage, degree programs in business administration are extensive. North Shore, Northern Essex, Merrimack, and Lowell Tech offer associate degrees in business administration. Salem State, Merrimack, and Lowell Tech also grant bachelor's degrees in business. The apparent duplication in the latter case is mitigated by the fact that Lowell Tech's degree is a B.B.A., which is more oriented toward direct application in management in technological industries. All three community colleges in the region operate occupational programs in accounting and secretarial skills.

The highest level of competition in business programs appears to be occurring between Merrimack, Lowell Tech, and Northern Essex at the associate degree level. Competition among these programs is intense. It is clear that the kind of interface of efforts observed in the engineering fields is not evolving among schools offering business-related degrees. Merrimack has suffered a sharp decline in enrollment in lower division business courses since North Shore and Northern Essex Community Colleges have opened duplicative programs and competitive courses.

In the occupational fields generally, program coverage is broad. Programs in the health service fields, though smaller than those in business and police science, are expanding to meet future employment demands. Two of the new associate degrees planned by Middlesex, for example, will be offered in medical technology and nursing.

Four associate programs in law enforcement are available, and all have large enrollments. In addition, Northeastern's three area branches offer extensive law enforcement courses. Such courses have a large, readily available clientele. Federal and state funding support for law enforcement programs increases their attractiveness. The availability of a noncredit special program (at North Shore) and a certificate program (at Northern Essex) are indicative of the depth of interest in this subject. In this area, as well, there is evidence, of programs being pioneered in the Northeastern branch campuses, then being replicated at the public community colleges, leading to a drop in Northeastern enrollment.

Salem State is planning new bachelor's degree programs that would significantly broaden the type of educational opportunities available for adults in the Northeast region. Scheduled for implementation in Fall 1973 is an open college B.A. degree, using independent study, television, videotape, and other nontraditional learning methods. Salem State also intends to broaden its existing baccalaureate programs to allow students to take advantage of such learning techniques while satisfying degree requirements. A planned B.S. in general studies at Salem State would open up additional advanced degree possibilities for graduates of associate degree programs in the region.

Lynn/Salem Area

The two area institutions - Salem State and North Shore Community College - offer a wide variety of academic, occupation and noncredit offerings. Salem State offers a range of degrees at the B.A. and graduate level in numerous program fields, particularly education, and is planning an open college general studies B.A. degree using nontraditional learning methods. North Shore Community College offers extensive occupational and noncredit programs. Competition is intense in this area with Northeastern's Lynn campus and with programs at proprietary institutions and adult education programs.

Andover/Lowell Area

This area demonstrates the possibilities for program articulation rather than competition. Lowell Tech has offered engineering programs at the associate and bachelor's levels. When Northern Essex began offering associate level programs, and drew students away, Lowell Tech expanded its bachelor's programs. In contrast, programs in business at Northern Essex, Merrimack and Lowell Tech are competitive, particularly at the associate degree level. (See the trend charts presented earlier to clarify this severe competition.)

Burlington/Bedford Area

This area has one public institution, Middlesex Community College, and the largest of the Northeastern branches in Burlington. Northeastern's course offerings in liberal arts, business, and engineering are extensive. Middlesex Community College has some competitive programs in liberal studies, law enforcement and business. Middlesex Community College offers noncredit courses in a variety of areas, but faces competition from active adult education programs in the surrounding towns. Middlesex is also planning new programs in health services.

It is suggested that the reader review the area trend charts (Section II.B.) and accompanying text for each geographic service area. Further, the reader should review the discussion of the education periphery (Section II.K.) to understand competition between core and periphery in these areas, and the failure of at least one quality proprietary institution due to duplication of its programs by a nearby public community college.

BEST COPY AVAILABLE

INVENTORY OF PROGRAMS OFFERED FALL, 1972 IN CONTINUING STUDIES, BY SUBJECT AND INSTITUTION

NORTHEAST REGION

KEY

A-associate degree
B-bachelor's degree
G-graduate program
C-certificate
S-credit special program (no degree)
N-non-credit special program
X-cross-registered
*-planned program

						BUSINESS							EDUCATION					
		Agriculture	Architecture	Area Studies	Biological Sci.	Accounting	Banking/Finance	Business Admin.	Secretarial	Other	Communication	Computer Sci.	Elementary	Secondary	Early Childhood	Vocational	General	Other
Lynn/Salem	North Shore C. C.							N A										
	Salem State							B					B	B G	B G		G	B G S
Andover/Lowell	Northern Essex C. C					A	A	A	A									
	Merrimack College							A B										
	Lowell Tech						A	A B				A B						
Burlington/Bedford	Middlesex C. C.																	

		ENGINEERING									HEALTH									
		Chemical	Civil	Electrical	Mechanical	Other	Fine Arts	Applied Arts	Foreign Lang.	Hospital Mgmt.	Medical Tech.	Nursing	Other	Home Economics	Child Care	Letters (Arts & Sci.)	English	Philosophy	Library Sci.	Law
Lynn/Salem	North Shore C. C.					A N	N	N						N						
	Salem State											B			S		B			
Andover/Lowell	Northern Essex C. C.																			
	Merrimack College					A B														
	Lowell Tech	A B	A B	A B	A B	A B								N						
Burlington/Bedford	Middlesex C. C.													N	C	A				

BEST COPY AVAILABLE

INVENTORY OF PROGRAMS OFFERED FALL, 1972 IN CONTINUING STUDIES, BY SUBJECT AND INSTITUTION, cont'd.

NORTHEAST REGION

KEY

A-associate degree
B-bachelor's degree
G-graduate program
C-certificate
S-credit special program (no degree)
N-non-credit special program
X-cross-registered
*-planned program

							PUBLIC AFFAIRS			SOCIAL SCIENCES								INTER-DISCIPLINARY		
		Mathematics	Military Sci.	Physics	Chemistry	Psychology	Public Admin.	Social Work	Other	Economics	History	Political Sci.	Sociology	Urban Studies	Other	Community Affairs	General Studies	Liberal Arts	Other	Unclassified
Lynn/Salem	North Shore C. C.													N		N	A	A		
	Salem State	B G									B G				G		B*		B*	
Andover/Lowell	Northern Essex C. C.																	A		
	Merrimack College																			
	Lowell Tech	A B																		
Burlington/Bedford	Middlesex C. C.							C								S		A		

KEY

Occupational Programs
A-associate degree
C-certificate or CEU
NS-non-credit special program

		OCCUPATIONAL PROGRAMS																
		BUSINESS/COMMERCE							HEALTH SERVICE							PUBLIC SERVICE		
		Accounting	Finance/Banking	Management	Marketing	Secretarial	Other	Data Processing Technology	Medical Tech.	Nursing	Other	Mechanical Engr. Technology	Environ Tech.	Food Service Tech.	Community Health	Police/Law Enforce.	Fire Sci. Tech.	Oth
Lynn/Salem	North Shore C. C.	A NS	A		A NS	A NS	A NS	A NS	A NS	A NS		A NS	A NS			A NS	A NS	
	Salem State																	
Andover/Lowell	Northern Essex C.C.	A	A			A				A						A C		
	Merrimack College																	
	Lowell Tech								A							A		
Burlington/Bedford	Middlesex C. C.	NS		A		A			A*	A*					C*	A		

SELECTED CHARACTERISTICS OF CONTINUING EDUCATION PROGRAMS OFFERED FALL, 1972

ASSOCIATE DEGREE PROGRAMS (academic)

BEST COPY AVAILABLE

NORTHEAST REGION

Subject/School	Degree	# of Courses	Time Offered	Program Head Count	FTE of Enrolled Students	# Matriculated Degree Candidates	# Degrees Granted (71-72)	Year Begun
ACCOUNTING								
Northern Essex	AS	--	e;n	no information reported				
Merrimack	AS	--	n	no information reported				
BANKING								
Northern Essex	AS	--	--	no information reported				
Lowell Tech	ABA	12	n	95	41	95		1971
BUSINESS ADMINISTRATION								
North Shore	AA	17	e;n	200	63	174	21	1965
Northern Essex	AS	9	--	NR	NR	NR	NR	NR
Lowell Tech	ABA	12	n	427	184	427	54[a]	1964
(Data Processing)	ABA	12	n	81	35	81		NR
Merrimack	AA	--	n	330	NR	NR	NR	NR
SCIENTIFIC DATA PROCESSING								
Lowell Tech	AT	9	n	38	16	38	5	1966
ENGINEERING								
CHEMICAL								
Lowell Tech	AS	8	n	53	23	53	5	NR
CIVIL								
Lowell Tech	AET	5	n	49	21	49	5	1961
ELECTRICAL								
Lowell Tech	AET	13	n	223	96	223	27	1956
INDUSTRIAL								
Lowell Tech	AET	7	n	51	22	51	5	1956
MECHANICAL								
Lowell Tech	AET	NR	n	148	64	148	10	1956
PLASTICS								
Lowell Tech	AET	NR	n	9	4	9		1956
GENERAL								
Merrimack	AA	NR	n	78	NR	NR	NR	NR
MATHEMATICS								
Lowell Tech	AT	NR	n	33	14	33	3	1965
GENERAL STUDIES								
North Shore	AA	27	e;n	531	187	475	41	1965
LIBERAL ARTS								
North Shore	AA	43	e;n	407	116	384	53	1965
Northern Essex	AA			no information reported				
Middlesex	AA	102	m;n	300	NR	300	2*	1970
ARTS & SCIENCES*								
Middlesex	AA	102	m;n	600	NR	600	2*	1970

[a] includes ABA degrees in Business Administration (Data Processing)

*Estimated by Middlesex C.C.

SELECTED CHARACTERISTICS OF CONTINUING EDUCATION PROGRAMS OFFERED FALL, 1972

ASSOCIATE DEGREE PROGRAMS (occupational)

NORTHEAST REGION

BEST COPY AVAILABLE

Subject/School	Degree	# of Courses	Time Offered	Program Head Count	FTE of Enrolled Students	# Matriculated Degree Candidates	# Degrees Granted (71-72)	Year Begun
ACCOUNTING								
North Shore	AA	8	e;n	221	75	194	24	1968
Northern Essex	AS			no information reported				
RETAILING								
North Shore	AA	2	e;n	44	12	13	1	1970
MANAGEMENT & ADMIN								
North Shore[b]	AA	10	e;n	309	96	27	15	1966
Northern Essex	AS			no information reported				
Middlesex	AS	12	n	65	NR	40	--	1970
SECRETARIAL								
North Shore[c]	AA	9	e;n	265	80	195	10	1965
Northern Essex	AA			no information reported				
Middlesex	AA	8	n	20	50	10	20	1970
DATA PROCESSING								
North Shore	AA	7	e;n	49	18	40	4	1968
RADIOLOGICAL TECHNOLOGY								
North Shore	AA	--	--	57	20	43	8	1970
Lowell Tech	AS	NR	n	18	8	18	--	1964
NURSING								
North Shore	AA	3	--	38	17	38	20	1968
Northern Essex				no information reported				
ELECTRO-MECHANICAL TECHNOLOGY								
North Shore	AA	4	--	25	25	25	4	1967
ENVIRONMENTAL HEALTH TECHNOLOGY								
North Shore	AA	2	n	19	1	13	2	1969
LAW ENFORCEMENT								
North Shore	AA	14	m;a;e;n	176	115	100	45	1968
Northern Essex				no information reported				
Lowell Tech	AT	NR	n	191	83	191	--	1969
Middlesex	AA	10	n	100	NR	60	--	1971
FIRE SCIENCE								
North Shore	AA	4	n	221	75	194	24	1968
AVIATION SCIENCE								
North Shore	AA	2	n;w	60	16	4	1	1968

[a] Included in Business Administration total for North Shore C.C.

[b] Includes AA programs in management, insurance, and real estate.

[c] Includes executive, legal, and medical secretarial programs.

SELECTED CHARACTERISTICS OF CONTINUING EDUCATION PROGRAMS OFFERED FALL, 1972

BACHELOR'S DEGREE PROGRAMS

NORTHEAST REGION

BEST COPY AVAILABLE

Subject/School	Degree	# of Courses	Time Offered	Program Head Count	FTE of Enrolled Students	# Matriculated Degree Candidates	# Degrees Granted (71-72)	Year Begun
BUSINESS ADMINISTRATION								
Salem State	BS	17	e;n	342	87	112	23	1962
Lowell Tech	BBA	13	n	82	35	82	14	1969
Merrimack	BS	NR	n	207	NR	NR	NR	NR
SCIENTIFIC DATA PROCESSING								
Lowell Tech	BT	4	n	--	--	--	--	1972
EDUCATION								
ELEMENTARY								
Salem State	BS	14	e;n	217	134	89	17	1960
SECONDARY								
Salem State	BS	16	e;n	152	48	46	2	1960
EARLY CHILDHOOD								
Salem State	BS	15	e;n	87	18	34	1	1970
BUSINESS								
Salem State	BS	10	e;n	93	46	41	1	1970
ENGINEERING								
CHEMICAL								
Lowell Tech	BST	NR	n	26	11	26	3	1969
CIVIL								
Lowell Tech	BSET	NR	n	10	4	10	--	1967
ELECTRONIC								
Lowell Tech	BSET	NR	n	128	55	128	17	1969
INDUSTRIAL								
Lowell Tech	BSET	NR	n	13	6	13	1	1969
MECHANICAL								
Lowell Tech	BSET	NR	n	52	22	52	15	1969
GENERAL								
Merrimack	BA	NR	n	68	NR	NR	NR	NR
NURSING								
Salem State	BS	5	e;n	88	88	--	--	1971
ENGLISH								
Salem State	BA	5	e;n	44	28	11	--	1969
MATHEMATICS								
Salem State	BA	5	e;n	27	22	5	--	1970
Lowell Tech	BT	NR	n	6	3	6	--	1972
HISTORY								
Salem State	BA	4	e;n	16	6	3	2	1969

BEST COPY AVAILABLE

SELECTED CHARACTERISTICS OF CONTINUING EDUCATION PROGRAMS OFFERED FALL, 1972

GRADUATE DEGREE PROGRAMS

NORTHEAST REGION

Subject/School	Degree	# of Courses	Time Offered	Program Head Count	FTE of Enrolled Students	# Matriculated Degree Candidates	# Degrees Granted (71-72)	Year Begun
EDUCATION								
SECONDARY								
Salem State	MEd	4	e;n	19	1	7	14	1957
EARLY CHILDHOOD								
Salem State	MEd	4	e;n	69	17	33	5	1970
GUIDANCE								
Salem State	MEd	8	e;n	228	26	122	52	1957
READING								
Salem State	MEd	6	e;n	124	12	80	36	1960
ADMINISTRATION								
Salem State	MEd	6	e;n	107	12	65	34	1960
ENGLISH								
Salem State	MAT	8	e;n	93	29	50	11	1967
MATHEMATICS								
Salem State	MAT	6	n	27	4	20	7	1967
CHEMISTRY								
Salem State	MAT	4	e;n	23	3	15	2	1967
HISTORY								
Salem State	MAT	6	e;n	72	10	39	29	1967
MATHEMATICS								
Salem State	MS	4	n	11	2	1	--	1971
HISTORY								
Salem State	MA	3	e;n	62	20	32	--	1971
GEOGRAPHY								
Salem State	MAT	2	e;n	21	5	5	--	1971

BEST COPY AVAILABLE

COURSE REGISTRATIONS IN CONTINUING EDUCATION PROGRAMS OFFERED FALL, 1972, BY SUBJECT

REGION: NORTHEAST

	NORTH SHORE C C	SALEM STATE	NORTHEASTERN-LYNN	NORTHERN ESSEX	MERRIMACK	LOWELL TECH	NORTHEASTERN-HAVERHILL	MIDDLESEX C C	NORTHEASTERN-BURLINGTON
Academic Fields of Study						N.R.			
Agriculture									
Architecture									
Area Studies		23							
Biological Sciences	140	46		65	70			*	10^{B}
Business/Management	620	477	303^{B}	177	297		135^{B}	*	2149^{B}
Communications	83		15^{B}				10^{B}		49^{B}
Computer/Info. Sciences	20				11				60^{A}
Education		1408						*	
Engineering					127		29^{A}		337^{A}
Fine & Applied Arts	209	91			7				178^{B}
Foreign Languages	59	65		15					67^{B}
Health Professions	86	52							12^{B}
Home Economics									
Letters (Arts & Sciences)	783	357	54^{B}	309	179		24^{B}	*	834^{B}
Library Science		25							43^{B}
Mathematics	376	120	19^{A}	113	107			*	270^{A}
Military Sciences									
Physical Sciences	147	17		32	15			*	153-B 108-A
Psychology	435	59	56^{B}	282	60		22^{B}	*	612-B
Public Affairs & Services	80				46				
Social Sciences	571	330	153^{B}	401	134		113^{B}	*	1376^{B}
Civic & Community Affairs	*							*	
Interdisciplinary Studies									
Other Fields	778								
Occupational Fields of Study									
Data Processing Tech.	16								
Health Services Tech.	159								
Mechanical & Engineering Technologies	119								
Natural Science Tech.	--								
Business & Commerce Tech.	162			87				*	
Public Service Related Technologies	*								
-Law Enforcement	471		115^{B}	211			130^{B}	*	864^{B}
-Fire Science	184								

A - Lincoln College
B - University College

* Courses offered in this field of study, Fall 1972 course registrations were not reported.

II.C.2. - Southeast Region

Discussion: Program Inventory Tables

Brockton Area
Fall River/New Bedford Area
Falmouth/Barnstable

Table: Inventory of Programs Offered Fall, 1972 in Continuing Studies, by Subject and Institution

Table: Selected Characteristics of Continuing Education Programs Offered Fall, 1972

Table: Course Registrations in Continuing Education Programs Offered Fall, 1972, by Subject

Discussion: Southeast Region Continuing Education Program Inventory Tables

In this region, as in most others, the heaviest concentration of academic degree programs occurs in business administration. In fact, only in two other fields--elementary education and interdisciplinary humanities-social sciences--are more than one degree program available. Thus, while duplication is generally not a problem in terms of degree programs, neither is a broad scope of programs characteristic of the Southeast region.

Unlike most of the other regions, there are few programs in education and engineering. Bridgewater State offers extensive master's programs in education, covering a broad range of specialty areas, but is virtually the only source of education degrees in the region. Besides Bridgewater's graduate offerings, the only education degree available is an associate program (with an enrollment of 39) in elementary education at Bristol Community College. There are no bachelor's degree programs offered in education through continuing studies in the region.

Most unusual, compared to the pattern in other regions, is the lack of engineering degree programs in both academic and occupational fields. Only two such programs are available, both of them at the associate degree level. Bristol Community College offers an occupationally-oriented associate degree in engineering technology. No doubt a significant factor in the low level of these technical programs is the relatively sizeable adult and two-year postsecondary enrollment (about 90) at the Southeastern Regional Vocational-Technical School in South Easton. The termination of mechanical and electrical engineering associate degree programs at Southeastern Massachusetts University in 1970 also contributed to the present situation in engineering fields.

In the Southeast region, following the statewide pattern, law enforcement-police science courses are extensive. Four institutions offer an associate degree in this subject; they are the three community colleges (Massasoit, Bristol, and Cape Cod) and Dean Junior College. Because Massasoit did not report detailed information about its occupational programs, it is difficult to draw definitive conclusions about law enforcement courses. Of the remaining three institutions, Bristol has both the largest and the oldest of these degree programs. Flexibility in this field is great. Bristol offers courses in the afternoon as well as at night, and Dean utilizes video-tape in its program, which is available at night and on Saturday. All of the schools note that these programs are successful, largely because of the federal and state subsidies available (Law Enforcement Education Program and Chapter 811, respectively). In view of the large potential clientele for these programs in every part of the region, coupled with strong financial incentives for their enrollment, it is doubtful that the four law enforcement programs are in any sense duplicative or competitive.

As previously noted, the bulk of the graduate degrees available through continuing studies are offered by Bridgewater State. It provides M.Ed. programs in a wide range of educational fields, as well as offering M.A. degrees in biology, chemistry, history, English, and humanities. These, however, are the only postbaccaulareate programs in the region, a fact which allows room for new program development on the graduate level.

Similarly, only one Southeast region institution provides bachelor's degrees. It is Southeastern Massachusetts University (S.M.U.) which offers a B.S. in Business Administration and a B.A. in humanities. Although courses leading to these degrees are given in a flexible schedule of evening, night, and weekend courses, the small size of the programs (a total of 12 degrees granted in 1971-72) indicates the possibility of potential growth in bachelor's programs in the region.

Some expansion in both graduate and bachelor's courses is being planned at S.M.U., which has indicated an interest in future bachelor's programs in accounting and English. S.M.U. is also considering a master's degree program in bilingual education, but no concrete steps were reported to implement it.

One school in the region--Stonehill College-- provides noncredit courses one night per week in business, communication, fine arts, philosophy, and biology. Enrollment is small, since the fee per course is considerably higher than that charged for comparable courses in public adult evening programs. At the two-year college level, both Cape Cod and Dean provide varied noncredit community service courses at fees comparable to those charged by Stonehill. These programs generally fall in the area of avocational interest, although Dean offers several certificate programs and practical courses awarding continuing education units (C.E.U.) in business management.

Brockton Area

A strong graduate program, primarily in education, at Bridgewater State is the dominant aspect of continuing education in this area. Other opportunities are sparse, with the exception of occupational programs at Massasoit. Associate level programs in business, nursing, technology, and public service are available. Despite the existence of a large liberal arts associate program at Massasoit, little opportunity for articulation to higher degrees is provided.

Fall River/New Bedford Area

The two area institutions - Bristol Community College and Southeastern Massachusetts University - offer sizeable degree programs in business, at the associate and bachelor's levels respectively. The opportunities, especially in occupational areas, are severely limited in this service area, although some proprietary institutions tend to fill that gap.

Falmouth/Barnstable Area

The only continuing education program in the area - at Cape Cod Community College - has an extensive range of subject areas at the lower division course level. Associate degrees, however, are limited to law enforcement and liberal studies. Advanced opportunities are nonexistent. Mass. Maritime initiated Continuing Education in the fall 1972 with several courses, but no formal degree programs. It is expected, however, that the program will expand quickly and soon grant degrees. A considerable number of avocational interest courses are provided by the community service program at Cape Cod.

It is suggested that the reader review the area trend charts (Section II.B.) and accompanying text for each geographic service area. Further, the reader should review the discussion regarding the education periphery (Section II.K.) to understand competition between the core and periphery in these areas.

INVENTORY OF PROGRAMS OFFERED FALL, 1972 IN CONTINUING STUDIES, BY SUBJECT AND INSTITUTION

SOUTHEAST REGION

BEST COPY AVAILABLE

KEY
A-associate degree
B-bachelor's degree
G-graduate program
C-certificate
S-credit special program (no degree)
N-non-credit special program
X-cross-registered
*-planned program

						BUSINESS							EDUCATION					
		Agriculture	Architecture	Area Studies	Biological Sci.	Accounting	Banking/Finance	Business Admin.	Secretarial	Other	Communication	Computer Sci.	Elementary	Secondary	Early Childhood	Vocational	General	Other
Brockton	Massasoit C. C.																	
	Bridgewater State				G								G				G	G
	Stonehill College				N	N		N		N	N							
	Dean Jr. College							A										
Fall River/ New Bedford	Bristol C. C.							A					A					
	S.M.U.							B										
Falmouth/ Barnstable	Mass. Maritime*																	
	Cape Cod C. C.																	

*Mass. Maritime initiated Continuing Education in the fall 1972 with several courses, but no formal degree programs. It is expected, however, that the program will expand quickly and soon grant degrees.

		ENGINEERING								HEALTH										
		Chemical	Civil	Electrical	Mechanical	Other	Fine Arts	Applied Arts	Foreign Lang.	Hospital Mgmt.	Medical Tech.	Nursing	Other	Home Economics	Child Care	Letters (Arts & Sci)	English	Philosophy	Library Sci.	Law
Brockton	Massasoit C. C.																			
	Bridgewater State																G			
	Stonehill College						N											N		
	Dean Jr. College						N													
Fall River New Bedford	Bristol C. C.					A													A	
	S.M.U.																			
Falmouth/ Barnstable	Cape Cod C. C.																			

BEST COPY AVAILABLE

INVENTORY OF PROGRAMS OFFERED FALL, 1972 IN CONTINUING STUDIES, BY SUBJECT AND INSTITUTION, cont'd.

SOUTHEAST REGION

KEY

- A-associate degree
- B-bachelor's degree
- G-graduate program
- C-certificate
- S-credit special program (no degree)
- N-non-credit special program
- X-cross-registered
- * planned program

						PUBLIC AFFAIRS			SOCIAL SCIENCES							INTER-DISCIPLINARY			
		Mathematics	Military Sci.	Physics	Chemistry	Psychology	Public Admin.	Social Work	Other	Economics	History	Political Sci.	Sociology	Urban Studies	Other	Community Affairs	General Studies	Liberal Arts	Other	Unclass
Brockton	Massasoit C. C.																	A		
	Bridgewater State				G						G								G	
	Stonehill College																			
	Dean Jr. College																		A	
Fall River/ New Bedford	Bristol C. C.																			
	S.M.U.																		B	
Falmouth/ Barnstable	Cape Cod C. C.															N		A		

KEY

Occupational Programs

- A-associate degree
- C-certificate or CEU
- NS-non-credit special program

OCCUPATIONAL PROGRAMS

		BUSINESS/COMMERCE							HEALTH SERVICE						PUBLIC SE		
		Accounting	Finance/Banking	Management	Marketing	Secretarial	Other	Data Processing Technology	Medical Tech.	Nursing	Other	Mechanical Engr. Technology	Environ Tech.	Food Service Tech.	Community Health	Police/Law Enforc	Fi
Brockton	Massasoit C. C.	A		A	A	A C				A		A				A	A
	Bridgewater State																
	Stonehill College																
	Dean Jr. College			C							C					A	
Fall River/ New Bedford	Bristol C. C.					NS										A	A
	S.M.U.																
Falmouth/ Barnstable	Cape Cod C. C.															A C	

SELECTED CHARACTERISTICS OF CONTINUING EDUCATION PROGRAMS OFFERED FALL, 1972

ASSOCIATE DEGREE PROGRAMS (academic)

SOUTHEAST REGION

BEST COPY AVAILABLE

Subject/School	Degree	# of Courses	Time Offered	Program Head Count	FTE of Enrolled Students	# Matriculated Degree Candidates	# Degrees Granted (71-72)	Year Begun
BUSINESS ADMINISTRATION								
Bristol	AS	20	n	248	124	148	25	1966
Dean	AS	12	n	15	3	15	--	1970
ELEMENTARY EDUCATION								
Bristol	AA	20	n	39	15	23	5	1966
ENGINEERING								
Bristol	AS	20	n	35	17	20	5	1966
LIBRARY SCIENCE								
Bristol	AS	20	n	10	2	6	--	1966
LIBERAL ARTS								
Massasoit	AA	58	e;n;w	888	120	NR	14	NR
Cape Cod	AA	34	n	17	--	17	--	1969
INTERDISCIPLINARY HUMANITIES/SOCIAL STUDIES								
Dean	AA	8	n	6	2	6	--	1970

ASSOCIATE DEGREE PROGRAMS (occupational)

Subject/School	Degree	# of Courses	Time Offered	Program Head Count	FTE of Enrolled Students	# Matriculated Degree Candidates	# Degrees Granted (71-72)	Year Begun
OCCUPATIONAL								
Massasoit[a]	AA AS	30	e;n;w	634	83	57	10	NR
LAW ENFORCEMENT								
Massasoit[a]			no information reported					
Bristol	AS	20	a;n	297	173	178	30	1966
Dean	AS	7	n;w	16	5	16	--	1969
Cape Cod	AA	21	n	13	3	13	--	1972
FIRE SCIENCE								
Massasoit[a]			no information reported					
Bristol	AS	20	n	182	91	109	5	1966
CORRECTIONS								
Dean	AS	9	n	--	--	--	--	1972

[a] Massasoit did not distinguish between occupational programs, but gave overall totals listed above. Programs are offered in accounting, business management, marketing, secretarial skills, nursing, enginerring technology, law enforcement, fire science, and social science.

SELECTED CHARACTERISTICS OF CONTINUING EDUCATION PROGRAMS OFFERED FALL, 1972

BACHELOR'S DEGREE PROGRAMS

SOUTHEAST REGION

BEST COPY AVAILABLE

Subject/School	Degree	# of Courses	Time Offered	Program Head Count	FTE of Enrolled Students	# Matriculated Degree Candidates	# Degrees Granted (71-72)	Year Begun
BUSINESS ADMINISTRATION								
S.M.U.	BS	120	e;n;w	59	NR	59	3	NR
HUMANITIES								
S.M.U.	BA	120	e;n;w	78	NR	78	9	NR

BEST COPY AVAILABLE

SELECTED CHARACTERISTICS OF CONTINUING EDUCATION PROGRAMS OFFERED FALL, 1972

GRADUATE DEGREE PROGRAMS

SOUTHEAST REGION

Subject/School	Degree	# of Courses	Time Offered	Program Head Count	FTE of Enrolled Students	# Matriculated Degree Candidates	# Degrees Granted (71-72)	Year Begun
BIOLOGY								
Bridgewater	MA	4	e;n	23	NR	23	2	1969
EDUCATION								
ELEMENTARY								
Bridgewater	MEd	21	e;n	121	NR	121	31	1963
ELEMENTARY SCHOOL MATH								
Bridgewater	MEd	15	e;n	25	NR	25	4	1969
GUIDANCE								
Bridgewater	MEd	14	e;n	208	NR	208	62	1965
SPECIAL								
Bridgewater	MEd	17	e;n	122	NR	122	27	1965
LEARNING DISABILITIES								
Bridgewater	MEd	16	e;n	43	NR	43	1	1970
HEALTH								
Bridgewater	MEd	9	e;n	28	NR	28	6	1969
INSTRUCTIONAL MEDIA								
Bridgewater	MEd	11	e;n	53	NR	53	2	1969
READING								
Bridgewater	MEd	12	e;n	91	NR	91	33	1966
ADMINISTRATION								
Bridgewater	MEd	14	e;n	85	NR	85	22	1966
LIBRARY								
Bridgewater	MEd	14	e;n	55	NR	55	3	1967
PHYS. ED.								
Bridgewater	MS	7	e;n	3	NR	3	--	1972

BEST COPY AVAILABLE

SELECTED CHARACTERISTICS OF CONTINUING EDUCATION PROGRAMS OFFERED FALL, 1972

GRADUATE DEGREE PROGRAMS, cont'd.

SOUTHEAST REGION

Subject/School	Degree	# of Courses	Time Offered	Program Head Count	FTE of Enrolled Students	# Matriculated Degree Candidates	# Degrees Granted (71-72)	Year Begun
EDUCATION								
FOREIGN LANGUAGES								
Bridgewater	MEd	10	e;n	6	NR	6	3	1965
MATHEMATICS								
Bridgewater	MEd	15	e;n	62	NR	62	8	1965
PHYSICS								
Bridgewater	MEd	NR	e;n	7	NR	7	1	1966
CHEMISTRY								
Bridgewater	MEd	11	e;n	9	NR	9	--	1966
	MA	4	e;n	3	NR	3	--	1970
EARTH SCIENCE								
Bridgewater	MEd	9	e;n	16	NR	16	4	1965
PHYSICAL SCIENCES								
Bridgewater	MEd	9	e;n	4	NR	4	2	1965
HISTORY								
Bridgewater	MEd	18	e;n	41	NR	41	10	1965
	MA	12	e;n	61	NR	61	5	1969
GEOGRAPHY								
Bridgewater	MEd	9	e;n	1	NR	1	--	1969
ENGLISH								
Bridgewater	MEd	18	e;n	53	NR	53	12	1965
	MA	12	e;n	9	NR	9	--	1971
SPEECH								
Bridgewater	MEd	10	e;n	6	NR	6	--	1970
HUMANITIES								
Bridgewater	MEd	21	e;n	3	NR	3	1	1968
	MA	15	e;n	1	NR	1	--	1972

BEST COPY AVAILABLE

COURSE REGISTRATIONS IN CONTINUING EDUCATION PROGRAMS OFFERED FALL, 1972, BY SUBJECT

REGION: SOUTHEAST

	MASSASOIT	BRIDGEWATER ST.	STONEHILL	DEAN JUNIOR	BRISTOL C.C.	SOUTHEASTERN MASS.	CAPE COD C.C.
Academic Fields of Study					N.R.		
Agriculture							
Architecture							
Area Studies							
Biological Sciences	*	137	*		*	76	34
Business/Management			*	53	*	450	358(179)
Communications	*	91	*		*		
Computer/Info. Sciences							
Education		2456		3		385	89(32)
Engineering					13		
Fine & Applied Arts	*	119	*		*	58	42
Foreign Languages	*	209			56	83	
Health Professions		65					
Home Economics							
Letters (Arts & Sciences)		317	*	22	*	234	416(66)
Library Science		164					17(3)
Mathematics	*	267		6	*	101	119(24)
Military Sciences							
Physical Sciences	*	140		9	35	63	
Psychology	*	352		22	*	286	308(9)
Public Affairs & Services					19		
Social Sciences	*	634		45	*	228	254(2)
Civic & Community Affairs	*						239(22)
Interdisciplinary Studies							
Other Fields		108					
Occupational Fields of Study							
Data Processing Tech.							
Health Services Tech.							
Mechanical & Engineering Technologies	*						
Natural Science Tech.							
Business & Commerce Tech.	*						
Public Service Related Technologies	*						
-Law Enforcement				79	326		92
-Fire Science					226		44

* Courses offered in this field of study. Fall 1972 course registrations were not reported.

II.C.2. - Boston Region

Discussion: Program Inventory Tables

Table: Inventory of Programs Offered Fall, 1972 in Continuing Studies, by Subject and Institution

Table: Selected Characteristics of Continuing Education Programs Offered Fall, 1972

Table: Course Registrations in Continuing Education Programs Offered Fall, 1972, by Subject

Discussion: Boston Continuing Education Program Inventory Tables

The scope of programs offered in continuing education in the Boston region is the broadest in the state. Although the region supports many large programs, competition is intense, particularly in those subjects which have seen the most duplication across the state: education, business and management.

In terms of both program size and variety of degree offerings, the region is dominated by the large continuing education programs at Northeastern University (Lincoln and University Colleges). Its 15,000 student enrollment accounts for 38% of the Boston region's continuing studies students, and almost 20% of all such students statewide. Other large programs include those at Bentley College (3200), Harvard (4869), Boston University's Metropolitan College (3900), and Boston State College (4300). Of these, however, only Boston University provides a bread range of degree concentration options at the associate and bachelor's level. Harvard offers degrees in extension studies with courses offered in a variety of academic fields. Bentley's students are concentrated in business courses and Boston State's enrollment is largely in education. Two slightly smaller programs -- at Suffolk and Boston College -- offer courses and degrees in numerous fields.

Although they do not compete in terms of degrees, proprietary and independent institutions and adult education centers in the Boston region are numerous and often large. Course competition by the former group is strongest in the areas of business and technology. One of the oldest business-oriented educational institutions in the state, for example, is Bryant and Stratton, a proprietary school that operates a continuing education division with about 200 students. Adult education programs provide a variety of special and avocational interest courses which are lacking in the offerings of the more academically-oriented colleges and universities.

So many different institutions offering such a wide range of courses necessarily entails an atmosphere charged with competition. Duplication occurs across practically every subject field. Although few programs in the region are unique, slight variations among them are numerous. Two subjects, however, with large scale programs of a similar nature offered by several institutions, are indicative of this situation. They are education and business, the two most competitive areas in every region.

Competition at the bachelor's level in education is minimal. Boston State College has the largest program, granting a total of 32 degrees in the 1971-72 academic year. Tufts University's small B.S. in education program granted 10 degrees in the same period, and Suffolk University granted only 4. On the graduate level, Boston State predominates with over 3100 students enrolled in its variety of education programs, with 1600 of them matriculated M.Ed. degree candidates. Elementary and secondary education degrees were first offered at Boston State in 1955, but Suffolk has run a somewhat smaller M.A. in education program since 1937. Ninety-five degrees were granted by Suffolk in this field in 1971-72. Newer master's degree programs in education -- M.Ed. and M.S. in elementary education -- are in their first year of operation at Lesley College with a matriculated enrollment of 89 students.

While the field of education appears to be dominated at the graduate level by Boston State, it should be noted that the Northeastern University Graduate School of Education offers late afternoon and evening part-time M.Ed. degrees, which have a part-time enrollment of 804. The Boston State and Northeastern programs -- although one is considered continuing education and the other part-time -- are essentially competing for the same graduate students in education.

Perhaps even more illuminating of the Boston region pattern is the competition in business and commerce courses. As mentioned above, proprietary and independent institutions that do not grant degrees nonetheless play a considerable role in courses in these fields, particularly those aimed at continuing education students who are seeking immediate job application of their instruction. Beyond this kind of program duplication, several colleges and universities offer similar business administration and management degrees at associate, bachelor's, and graduate levels.

The most complex situation involves M.B.A. programs, which, like graduate education courses, cut across this study's part-time continuing education distinction. Suffolk and Babson have offered these degrees since 1937 and 1961, respectively, through evening divisions. Babson's program is slightly larger, in terms of head count (732 vs. 371 in fall 1972) and number of degrees granted (185 vs. 131 in 1971-72). In addition, Northeastern's graduate program in business offers M.B.A. degrees, largely to part-time evening students. Its size -- 720 part-time students -- and its evening schedule put it and the continuing education programs in competition for graduate business students in the Boston region. Another such part-time program, at Boston College's School of Management, has an enrollment of 219 matriculated degree candidates. Costs among these M.B.A. programs vary slightly; Northeastern, Boston College, and Babson charge slightly higher fees than Suffolk.

Five schools offer bachelor's degrees in business administration, with the oldest and largest (in terms of degrees granted) being Northeastern. Other large programs are provided by Boston College, Boston University, and Bentley College. The newest and smallest of the five is Suffolk, which has a program head count of 32 students in a degree program first offered in 1970. Suffolk, however, also has offered a B.A. in general business since 1937, a program which currently has 106 matriculated degree candidates. Northeastern and Suffolk both offer bachelor's degrees in accounting, programs begun in 1907 and 1937 respectively. Northeastern's program, with morning and night classes, is both the most flexible and least expensive. Tuition for the other programs ranges from $120/course at Suffolk to $200/course at Boston University.

At the associate degree level, three institutions (Northeastern, Massachusetts Bay, and Bentley) offer an A.S. in business, while Suffolk has a small A.B.A. program. Massachusetts Bay has the newest of these, including a Federal option program for civil service employees that was begun in 1969 and has a program head count of 528. A regular A.S. in business program at Massachusetts Bay has an enrollment of 200, with one degree granted in 1971-72. During the same period, both Northeastern and Bentley granted more than 40 such degrees. Additional associate degree programs are planned by Boston University (in accounting and management) and by Bunker Hill Community College (in management and secretarial skills).

Bentley College's Center for Continuing Education offers a range of business programs that are unique among Boston region colleges and universities. These are job-oriented courses and workshops in such fields as accounting, finance, management, and data processing. As noted earlier, however, a large number of proprietary institutions in the region offer such programs, though few cover the breadth of subject matter that Bentley does with its continuing education program.

In the area of technology, Northeastern has a virtual monopoly on degree programs. Through its Lincoln College, it offers associate degrees in several engineering fields. Part-time programs in engineering, with 1300 graduate students and 350 undergraduates, are also offered by Northeastern's School of Engineering.

Typically, law enforcement is a popular area, with large associate degree programs at Northeastern and Massachusetts Bay. In addition, Boston University and Bunker Hill Community College are planning to institute such degrees, a move which appears duplicative. Northeastern also has a bachelor's degree in law enforcement, which granted 35 degrees in 1971-72. A new B.A. in law enforcement was begun by Boston College in 1972, with 10 students enrolled. Northeastern's law enforcement program is the most flexible, with morning, afternoon, evening, night, and weekend classes in numerous locations. Related associate programs in security and corrections are also available at Northeastern.

Beyond these few areas of concentrated program activity, degrees in numerous other fields are available at schools in the Boston region. The scope of these can be observed on the inventory of programs table. Further opportunities for continuing education are provided by the region's adult education centers and proprietary and independent institutions. These periphery schools offer diverse nondegree programs, including job-related skill training and personal interest courses. Competition among these programs is intense, although the tendency is more toward innovation than duplication among new programs.

In conclusion, the scope of programs offered in continuing education in the Boston region is the broadest in the state. Although the region supports many large programs, competition is intense, particularly in those subjects which have seen the most duplication across the state:

education, business and management. In terms of both program size and variety of degree offerings, the area is dominated by the large continuing education programs at Northeastern University (Lincoln and University Colleges), accounting for 38% of the area's continuing studies students. Large programs are also provided by several other private institutions. Proprietary and independent institutions and adult education centers are numerous and often large. Course competition between the former group and colleges and universities is strongest in the areas of business and technology. Competition and duplication at both the program and individual course level promises to become even more severe as Bunker Hill and Roxbury Community Colleges open continuing education programs and as U./Mass.-Boston continues its policy of increasing substantially part-time enrollment in its full-time programs and courses.

It is suggested that the reader review the area trend charts (Section II.B.) and accompanying text for the Boston georgaphic service area. Further, the reader should review the discussion regarding the education periphery (Section II.K.) to understand competition between the core and periphery in this area.

INVENTORY OF PROGRAMS OFFERED FALL, 1972 IN CONTINUING STUDIES, BY SUBJECT AND INSTITUTION

BOSTON REGION

BEST COPY AVAILABLE

KEY

A-associate degree
B-bachelor's degree
G-graduate program
C-certificate
S-credit special program (no degree)
N-non-credit special program
X-cross-registered
*-planned program

	Agriculture	Architecture	Area Studies	Biological Sci.	BUSINESS Accounting	Banking/Finance	Business Admin.	Secretarial	Other	Communication	Computer Sci.	EDUCATION Elementary	Secondary	Early Childhood	Vocational	General	Other
Boston State Col.												B G	B G	G		G	G
Northeastern U.					A B	C	A B					B					
Boston Univ.				B			B				N B*						
Wheelock Col.														C A*			
Wentworth Inst.																	
Suffolk Univ.				B	B	B	A B G			B		B	B			G	
Radcliffe Inst.																	
Harvard U.																	
Mass. Col. of Art																	G
Lesley Col.												G					S
Boston Col.			B	B			B										
Hebrew Col.																	
Mass. Bay C.C.							A							A			
Bunker Hill C.C.																	
Tufts				S								B S	B	S	S		
Bentley Col.					N		A B C		N								
Babson Col.							G N										
Newton J.C.			A	A					A								
Quincy J.C.				A	A		A										

	ENGINEERING Chemical	Civil	Electrical	Mechanical	Other	Fine Arts	Applied Arts	Foreign Lang.	HEALTH Hospital Mgmt.	Medical Tech.	Nursing	Other	Home Economics	Child Care	Letters (Arts & Sci)	English	Philosophy	Library Sci.	Law
Boston State Col.																			
Northeastern U.		A B	A B	A B	A	B B	A B		B	A B		A B			A B	B			
Boston Univ.						B		S				S				B	B		
Wheelock Col.																			
Wentworth Inst.																			
Suffolk Univ.								B		B		B		B		B	B		G*
Radcliffe Inst.																			
Harvard U.																			
Mass. Col. of Art																			
Lesley Col.														S C* A* B*					
Boston Col.																B			
Hebrew Col.								N											
Mass. Bay C.C.																			
Bunker Hill C.C.																			
Tufts																			
Bentley Col.															B				
Babson Col.																			
Newton J. Col.						A		A											
Quincy J. Col.						A		A							A				

INVENTORY OF PROGRAMS OFFERED FALL, 1972 IN CONTINUING STUDIES, BY SUBJECT AND INSTITUTION

BEST COPY AVAILABLE

BOSTON REGION, cont'd.

KEY
- A-associate degree
- B-bachelor's degree
- G-graduate program
- C-certificate
- S-credit special program (no degree)
- N-non-credit special program
- X-cross-registered
- *-planned program

	Mathematics	Military Sci.	Physics	Chemistry	Psychology	PUBLIC AFFAIRS: Public Admin.	PUBLIC AFFAIRS: Social Work	PUBLIC AFFAIRS: Other	SOCIAL SCIENCES: Economics	SOCIAL SCIENCES: History	SOCIAL SCIENCES: Political Sci.	SOCIAL SCIENCES: Sociology	SOCIAL SCIENCES: Urban Studies	SOCIAL SCIENCES: Other	Community Affairs	INTER-DISCIPLINARY: General Studies	INTER-DISCIPLINARY: Liberal Arts	INTER-DISCIPLINARY: Other	Unclassified
Boston State Col.										B									
Northeastern Univ.			A	A B	B				B	B	B	B					A B G		A
Boston Univ.	B						B			B G		B	B G				B G		
Wheelock Col.																			
Wentworth Inst.																			
Suffolk Univ.	B		B G	B G	B		B	B	B	B	B	A B							
Radcliffe Inst.																		B	
Harvard U.																		A B	
Mass. Col. of Art																			
Lesley Col.																			
Boston Col.	B				B									B					
Hebrew Col.																		N	
Mass. Bay C.C.																	A		
Bunker Hill C.C.																	A*		
Tufts	S				S													B	
Bentley Col.																			
Babson Col.																			
Newton J.C.	A		A	A	A				A	A	A	A						A	
Quincy J.C.	A		A	A	A				A	A	A	A							

KEY

Occupational Programs
- A-associate degree
- C-certificate or CEU
- NS-non-credit special program

OCCUPATIONAL PROGRAMS

	BUSINESS/COMMERCE: Accounting	BUSINESS/COMMERCE: Finance/Banking	BUSINESS/COMMERCE: Management	BUSINESS/COMMERCE: Marketing	BUSINESS/COMMERCE: Secretarial	BUSINESS/COMMERCE: Other	Data Processing Technology	HEALTH SERVICE: Medical Tech.	HEALTH SERVICE: Nursing	HEALTH SERVICE: Other	Mechanical Engr. Technology	Environ Tech.	Food Service Tech.	PUBLIC SERVICE: Community Health	PUBLIC SERVICE: Police/Law Enforce	PUBLIC SERVICE: Fire Sci. Tech.	PUBLIC SERVICE: Other
Boston State Col.																A*	
Northeastern U.															A B		
Boston Univ.	A*		A*				A*				A*			NS	A*		
Wheelock Col.																	
Wentworth Inst.											NS						
Suffolk Univ.																	
Radcliffe Inst.																	
Harvard U.																	
Mass. Col. of Art																	
Lesley Col.																	
Boston Col.															B		
Hebrew Col.																	
Mass. Bay C.C.															A	A	
Bunker Hill C.C.			A*		A*										A*	A*	A*
Tufts																	C
Bentley Col.	C	C	C				C				C						
Babson Col.																	
Newton J. Col.					A	A	A		A								
Quincy J. Col.					A A		NS										

H-306

SELECTED CHARACTERISTICS OF CONTINUING EDUCATION PROGRAMS OFFERED FALL, 1972

ASSOCIATE DEGREE PROGRAMS (academic)

BOSTON REGION

BEST COPY AVAILABLE

Subject/School	Degree	# of Courses	Time Offered	Program Head Count	FTE of Enrolled Students	# Matriculated Degree Candidates	# Degrees Granted (71-72)	Year Begun
BUSINESS								
Northeastern	AS	91	m;n	179	63	179	48	1907
Suffolk	ABA	17	e;n	17	7	17	1	1937
Mass. Bay	AS	NR	n	200	NR	24	1	1963
(Federal option)	AS	NR	n	528	NR	62	--	1969
Bentley	AS	NR	n	1190[a]	380[a]	1190[a]	44	1961
Newton J.C.	AS	NR	m;a;e; n	NR	NR	NR	NR	1946
Quincy J.C.	AS	NR	n;e	180	NR	NR	NR	1962
ACCOUNTING								
Northeastern	AS	NR	n	8	4	8	--	1907
COMPUTER SCIENCE								
Northeastern	AS/AE	NR	n	76	30	76	34	NR
EARLY CHILDHOOD ASSISTANT								
Mass. Bay	AS	NR	n	149	NR	12	3	1969
ENGINEERING								
ELECTRICAL								
Northeastern	AE	NR	n	127	44	127	64	1904
MECHANICAL								
Northeastern	AE	NR	n	107	36	107	45	1904
CIVIL								
Northeastern	AE	NR	n	14	5	14	13	1904
ENVIRONMENTAL								
Northeastern	AE	NR	n	3	1	3	2	1968
HEAT								
Northeastern	AE	NR	n	10	4	10	5	1904
APPLIED ART								
Northeastern	AS	NR	n	2	1	2	--	NR
DENTAL HYGIENE								
Northeastern	AS	NR	e;n	NR	NR	NR	101	1965
RADIOLOGIC TECHNOLOGY								
Northeastern	AS	NR	e;n	39	13	39	10	1965
THERAPEUTIC RECREATION								
Northeastern	AS	NR	e;n	1	1	1	--	1965
CHEMISTRY-BIOLOGY								
Northeastern	AS	NR	m;n	7	3	7	5	NR
Quincy J.C.	AA	NR	n;e	60				1962
CHEMISTRY-PHYSICS								
Northeastern	AS	NR	m;n	8	3	8	1	NR
Quincy	AA	NR	n;e	35	NR	NR	NR	1963
MATH-PHYSICS								
Northeastern	AS	NR	m;n	4	1	4	5	NR
Quincy J.C.	AA	NR	n;e	30	NR	NR	NR	1963
AVIATION TECHNOLOGY								
Northeastern	AS	NR		14	6	14	15	NR

[a] Includes BS and certificate programs in business administration, which are not distinguished in these totals.

BEST COPY AVAILABLE

SELECTED CHARACTERISTICS OF CONTINUING EDUCATION PROGRAMS OFFERED FALL, 1972

ASSOCIATE DEGREE PROGRAMS (academic), cont'd.

BOSTON REGION

Subject/School	Degree	# of Courses	Time Offered	Program Head Count	FTE of Enrolled Students	# Matriculated Degree Candidates	# Degrees Granted (71-72)	Year Begun
SOCIAL SCIENCES								
Suffolk	AA	9	e;n	8	3	8	1	1935
Quincy J.C.	AA	NR	n;e	280	NR	NR	NR	1963
LIBERAL ARTS								
Northeastern	AS	NR	m;n	NR	NR	NR	5	1938
Mass. Bay	AS	NR	n	600	NR	32	3	1963
Newton J.C.	AA/AS	NR	m;e n	NR	NR	NR	NR	1952
Quincy J.C.	AA	NR	e;n	470	NR	NR	NR	1963
EXTENSION STUDIES								
Harvard	AA	------------no information reported------------						1961

ASSOCIATE DEGREE PROGRAMS (occupational)

LAW ENFORCEMENT								
Northeastern	AS	175	m;a;e;n;w	104	43	104	64	NR
Mass. Bay	AS	NR	n	254	NR	20	13	1969
SECURITY								
Northeastern	AS	175	m;a;e;n;w	4	3	4	2	NR
CORRECTIONS								
Northeastern	AS	175	m;a;e;n;w	7	3	7	--	NR
FIRE SCIENCE								
Mass. Bay	AS	NR	n	400	NR	6	--	1968
SECRETARIAL								
Newton J.C.	AS	NR	m;a;n;e	NR	NR	NR	NR	1967
Quincy J.C.	AS	NR	n;e	100	NR	NR	NR	1963
DATA PROCESSING								
Newton J.C.	AS	NR	NR	NR	NR	NR	NR	1962
NURSING								
Newton J.C.	AS	NR	NR	NR	NR	NR	NR	1959

BEST COPY AVAILABLE

SELECTED CHARACTERISTICS OF CONTINUING EDUCATION PROGRAMS OFFERED FALL, 1972

BACHELOR'S DEGREE PROGRAMS

BOSTON REGION

Subject/School	Degree	# of Courses	Time Offered	Program Head Count	FTE of Enrolled Students	# Matriculated Degree Candidates	# Degrees Granted (71-72)	Year Begun
AREA STUDIES								
Boston College	BA	8	n	14	14	14	2	1969
BIOLOGICAL SCIENCES								
Boston U.	BLS	7	n	320	80	9	--	1971
Suffolk	BA	6	e;n	12	5	12	1	1935
Boston College	BA	NR	n	2	2	2	--	1969
ACCOUNTING								
Northeastern	BS	91		55	21	55	29	1907
Suffolk	BA	6	e;n	72	30	72	8	1937
FINANCE								
Suffolk	BA	3	e;n	32	14	32	5	1970
GENERAL BUSINESS								
Suffolk	BA	17	e;n	106	44	106	5	1937
BUSINESS ADMINISTRATION								
Northeastern	BS	91	m;n	471	163	471	409	1907
Boston U.	BAS	32	n	642	160-1/2	107	25	1965
Suffolk	BA	3	e;n	32	14	32	5	1970
Boston College	BA	10	n	[illegible]	122	155	33	1946
Bentley	BS	NR	n	1190	380[b]	1190[b]	96	1961
JOURNALISM								
Suffolk	BS	1	e	13	6	13	2	1936
COMPUTER SCIENCES								
Boston U.	BAS	15	n	293	75	40	14	1968
EDUCATION								
ELEMENTARY								
Boston State	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NR
Northeastern	BS	NR	NR	--	--	--	--	NR
Suffolk	BA	2	e;n	11	5-1/2	11	4	1935
Tufts	BS	NR	NR	2	1	1	6	1946
SECONDARY								
Boston State	N/A	N/A	N/A	N/A	N/A	N/A	N/A	--
Suffolk	BA	------------no information reported------------						1937
Tufts	BS	NR	NR	4	NR	1	4	NR
FINE ARTS								
Boston U.	BLS	6	n	138	36-1/2	6	--	1971
ART HISTORY								
Northeastern	BS	NR	n	4	2	4	2	1965
MUSIC HISTORY								
Northeastern	BS	NR	n	1	1	1	--	NR
APPLIED ART								
Northeastern	BS	NR	n	2	1	2	--	NR

[b] Includes AS and certificate programs in business administration, which are not distinguished in these totals.

[c] Includes secondary education BS degrees.

BEST COPY AVAILABLE

SELECTED CHARACTERISTICS OF CONTINUING EDUCATION PROGRAMS OFFERED FALL, 1972

BACHELOR'S DEGREE PROGRAMS, cont'd.

BOSTON REGION

Subject/School	Degree	# of Courses	Time Offered	Program Head Count	FTE of Enrolled Students	# Matriculated Degree Candidates	# Degrees Granted (71-72)	Year Begun
FOREIGN LANGUAGES								
Suffolk	BA	1	e;n	2	1	2	--	1935
MEDICAL TECHNOLOGY								
Northeastern	BS	NR	e;n	7	3	7	--	1965
Suffolk	BA	6	NR	7	3	7	2	1960
PRE-DENTAL								
Suffolk	BA	6	NR	5	2-1/2	5	--	1935
DENTAL HYGIENE								
Northeastern	BS	NR	e;n	4	2	4	NR	1965
MEDICAL RECORDS TECHNOLOGY								
Northeastern	BS	NR	e;n	4	2	4	3	1965
CYTOTECHNOLOGY								
Northeastern	BS	NR	e;n	4	2	4	2	1965
HEALTH AGENCY MANAGEMENT								
Northeastern	BS	NR	e;n	4	2	4	9	1965
CHILD CARE								
Suffolk	BA	2	n	2	1	2	--	1969
LETTERS								
Bentley	BS	NR	n	60	20	60	NR	1971
ENGLISH								
Northeastern	BS	NR	m;n;w	22	8	22	13	NR
Boston U.	BLS	18	n	455	116	33	8	1966
Suffolk	BA	5	e;n	21	7	21	2	1935
Boston College	BA	10	n	150	99	150	23	1938
PHILOSOPHY								
Boston U.	BLS	7	n	110	27-1/2	3	--	1971
Suffolk	BA	4	e;n	3	1	3	1	1935
HUMANITIES								
Suffolk	BA	2	e;n	3	1	3	--	1935
MATHEMATICS								
Boston U.	BLS	12	n	246	62-1/2	14	5	1967
Suffolk	BA	5	n	8	2-1/2	8	1	1935
Boston College	BA	NR	n	2	2	2	3	1969
PHYSICS								
Suffolk	BA	2	e	2	1/2	2	--	1935
CHEMISTRY								
Northeastern	BS	NR	m;n	10	3	10	3	NR
Suffolk	BA	3	e;n	13	6	14	--	1935

BEST COPY AVAILABLE

SELECTED CHARACTERISTICS OF CONTINUING EDUCATION PROGRAMS OFFERED FALL, 1972

BACHELOR'S DEGREE PROGRAMS, cont'd.

BOSTON REGION

Subject/School	Degree	# of Courses	Time Offered	Program Head Count	FTE of Enrolled Students	# Matriculated Degree Candidates	# Degrees Granted (71-72)	Year Begun
PSYCHOLOGY								
Northeastern	BS	NR	m;n	29	11	29	21	NR
Suffolk	BA	3	e;n	17	6	17	27	1935
Boston College	BA	7	n	14	14	14	2	1969
SOCIAL WORK								
Boston U.	BLS	9	n	102	25-1/2	7	4	NR
Suffolk	BA	1	e	4	2	4	--	1968
CRIME AND DELINQUENCY								
Suffolk	BA	5	e;n;w	14	6	14	17	1969
LAW ENFORCEMENT								
Boston College	BA	1	n	10	10	10	--	1972
Northeastern	BS	175	m;a;e;n;w	43	20	43	35	NR
SECURITY								
Northeastern	BS	175	m;a;e;n;w	5	2	5	4	NR
CORRECTIONS								
Northeastern	BS	175	m;a;e;n;w	7	3	7	--	NR
ECONOMICS								
Northeastern	BS	NR	m;n	5	2	5	3	NR
Suffolk	BA	3	e;n	7	3	7	2	1935
HISTORY								
Northeastern	BS	NR	m;n	4	2	4	11	NR
Boston U.	BLS	12	n	255	63-1/2	26	9	NR
Suffolk	BA	6	e;n	17	7	17	2	1935
POLITICAL SCIENCE								
Northeastern	BS	NR	m;n	9	4	9	4	NR
Suffolk	BA	10	e;n;w	15	4	15	5	1935
SOCIOLOGY								
Northeastern	BS	NR	m;n	35	13	35	16	NR
Boston U.	BLS	6	n	129	32	8	--	NR
Suffolk	BA	11	e;n	21	8	21	2	1935
SOCIAL SCIENCES								
Boston College	BA	18	n	149	98	149	23	1938
URBAN AFFAIRS								
Boston U.	BAS	5	n	129	32	39	12	NR
LIBERAL ARTS								
Northeastern	BS	NR	m;a;n;w	36	12	36	28	NR
Boston U.	BLS	NR	n	NR[d]	NR[d]	158	18	NR
EXTENSION STUDIES								
Radcliffe	AB	NR	m	40	NR	NR	NR	NR
Harvard	AB	------------no information reported------------						
INTERDISCIPLINARY STUDIES								
Tufts	BA	NR	m;a;e	30	NR	30	4	1970

[d] Includes individual concentrations in areas listed above in Boston University Metropolitan College.

BEST COPY AVAILABLE

SELECTED CHARACTERISTICS OF CONTINUING EDUCATION PROGRAMS OFFERED FALL, 1972

GRADUATE DEGREE PROGRAMS

BOSTON REGION

Subject/School	Degree	# of Courses	Time Offered	Program Head Count	FTE of Enrolled Students	# Matriculated Degree Candidates	# Degrees Granted (71-72)	Year Begun
BUSINESS ADMINISTRATION								
Suffolk	MBA	11	e;n	371	157-1/2	371	131	1937
Babson	MBA	NR	n	732	249	732	185	1961
EDUCATION								
ELEMENTARY								
Boston State	MEd	8	e;n	NR	NR	19	585	1955
Lesley	MS MEd	NR	NR	89	45	89	NR	1972
GENERAL								
Suffolk	MA	15	e;n	256	90	256	95	1937
ART								
Mass. College of Art	MS	20	n	300	NR	32	--	1964
EARLY CHILDHOOD*	MEd	8	e;n	NR	NR	151	NR	1968
LATIN AMERICAN STUDIES*	MEd	3	e;n	NR	NR	18	NR	1970
BILINGUAL STUDIES*	MEd	5	e;n	NR	NR	42	NR	1970
COMMUNITY SERVICE*	MEd	8	e;n	NR	NR	58	NR	1970
ADMINISTRATION*	MEd	8	e;n	NR	NR	152	NR	1966
INSTRUCTIONAL MEDIA*	MEd	4	e;n	NR	NR	20	NR	1970
READING (ELEMENTARY)*	MEd	8	e;n	NR	NR	27	NR	1969
READING (SECONDARY)*	MEd	8	e;n	NR	NR	52	NR	1969
SECONDARY*	MEd	8	e;n	NR	NR	87	NR	1955
URBAN *	MEd	8	e;n	NR	NR	25	NR	1970

*All remaining education degree programs listed are offered by Boston State College.

SELECTED CHARACTERISTICS OF CONTINUING EDUCATION PROGRAMS OFFERED FALL, 1972

GRADUATE DEGREE PROGRAMS, cont'd.

BEST COPY AVAILABLE

Subject/School	Degree	# of Courses	Time Offered	Program Head Count	FTE of Enrolled Students	# Matriculated Degree Candidates	# Degrees Granted (71-72)	Year Begun
EDUCATION, cont'd.								
FOREIGN LANGUAGES*	MEd	5	e;n	NR	NR	22	NR	1960
ENGLISH*	MEd	5	e;n	NR	NR	28	NR	1955
SPEECH*	MEd	3	e;n	NR	NR	18	NR	1969
MATHEMATICS*	MEd	5	e;n	NR	NR	23	NR	1959
NATURAL SCIENCES*	MEd	3	e;n	NR	NR	20	NR	1970
EARTH SCIENCES*	MEd	5	e;n	NR	NR	18	NR	1970
PSYCHOLOGY*•	MEd	8	e;n	NR	NR	242	NR	1970
VOCATIONAL REHABILITATION AND COUNSELING*	MEd	8	e;n	NR	NR	53	NR	1970
SPECIAL*	MEd	8	e;n	NR	NR	62	NR	1969
HISTORY*	MEd	5	e;n	NR	NR	75	NR	1955
POLITICAL SCIENCE*	MEd	5	e;n	NR	NR	22	NR	1970
SOCIAL SCIENCES*	MEd	5	e;n	NR	NR	12	NR	1955
URBAN STUDIES*	MEd	4	e;n	NR	NR	77	NR	1970
PUBLIC MANAGEMENT*	MEd	3	e;n	NR	NR	68	NR	1970
LAW Suffolk	JD	NR	e;n	1121	NR	NR	NR	NR
PHYSICS Suffolk	MS	2	e;n	6	2	6	4	1935
CHEMISTRY Suffolk	MS	3	e;n	11	4	11	--	1935
HISTORY Boston U.	MLA	70	n	15	4	7	--	NR
URBAN AFFAIRS Boston U.	MUA	9	n	250	62-1/2	120	20	NR
LIBERAL STUDIES Boston U.	MLS	5	n	57	58	NR	4	NR

*All remaining education degree programs listed are offered by Boston State College

•Includes several programs in educational psychology

BEST COPY AVAILABLE

COURSE REGISTRATIONS IN CONTINUING EDUCATION PROGRAMS OFFERED FALL, 1972, BY SUBJECT

REGION: BOSTON

	BOSTON STATE[1]	NORTHEASTERN	BOSTON UNIV.	WHEELOCK	WENTWORTH	SUFFOLK	RADCLIFFE	HARVARD
Academic Fields of Study								
Agriculture								
Architecture								
Area Studies								
Biological Sciences	65	454[b]	260			50		324
Business/Management		4568[b]	488			1455		
Communications		307[b]				29		
Computer/Info. Sciences	12	248[a]	293			47		
Education	3515	158[b]		224		446		
Engineering		1410[a]						
Fine & Applied Arts	96	434[b]	218	20			(111)	335(
Foreign Languages	55	233[b]	218			29		1745 (852
Health Professions		499[b]						
Home Economics							(17)	127(
Letters (Arts & Sciences)	208	1925[b]	678	25		339	(35)	115 [illegible]
Library Science								
Mathematics	69	972[a]	246			75		86(
Military Sciences		280[a]						
Physical Sciences	103	1028[b]	247	23		56		240(
Psychology	402	1197[b]	467	40		166	(20)	414(
Public Affairs & Services		51[b]	100			52		
Social Sciences	333	2853[b]	1307	35		559	39	1100 (28
Civic & Community Affairs								
Interdisciplinary Studies	67		106					672(
Other Fields								
ccupational Fields of Study								
Data Processing Tech.								
Health Services Tech.								
Mechanical & Engineering Technologies								
Natural Science Tech.								
Business & Commerce Tech.								
Public Service Related Technologies								
-Law Enforcement		1667[b]						
-Fire Science								

a = Lincoln College
b = University College

[1] Boston State enrollments for spring. Fall enrollment figures were not reported.

BEST COPY AVAILABLE

COURSE REGISTRATIONS IN CONTINUING EDUCATION PROGRAMS OFFERED FALL, 1972, BY SUBJECT

REGION: BOSTON

	BENTLEY	NORTHEASTERN WEYMOUTH	NORTHEASTERN NORWOOD	MASS COLLEGE OF ART	BABSON
Academic Fields of Study					
Agriculture					
Architecture					
Area Studies					
Biological Sciences					
Business/Management	1067	645[b]			1170
Communications		20[b]			
Computer/Info. Sciences		23[a]			
Education	157(24)		6[b]		
Engineering		105[a]			
Fine & Applied Arts			13[b]	390	
Foreign Languages					
Health Professions					
Home Economics					
Letters (Arts & Sciences)	260	183[b]	16[b]		
Library Science					
Mathematics	142	94[a]			
Military Sciences					
Physical Sciences	42	85[b] 24[a]	12[a]		
Psychology	65	192[b]	30[b]		
Public Affairs & Services					
Social Sciences	375	301[b]	15[b]		
Civic & Community Affairs					
Interdisciplinary Studies					
Other Fields			15[a-2]		
cupational Fields of Study					
Data Processing Tech.					
Health Services Tech.					
Mechanical & Engineering Technologies					
Natural Science Tech.					
Business & Commerce Tech.					
Public Service Related Technologies					
-Law Enforcement		224[b]	81[b]		
-Fire Science					

a = Lincoln College
b = University College

[2] Air Science & Navigation

BEST COPY AVAILABLE

COURSE REGISTRATIONS IN CONTINUING EDUCATION PROGRAMS OFFERED FALL, 1972, BY SUBJECT

REGION: BOSTON

	LESLEY	MIT	PINE MANOR	BOSTON COLLEGE	HEBREW TC	MASS BAY CC	TUFTS
Academic Fields of Study		N.R.	N.R.				N.R.
Agriculture							
Architecture							
Area Studies							
Biological Sciences				17		*	
Business/Management				313(17)		728	
Communications						149	
Computer/Info. Sciences							
Education	*			121(2)		*	
Engineering							
Fine & Applied Arts				19(2)		*	
Foreign Languages				92(6)	(*)	*	
Health Professions				12		40	
Home Economics							
Letters (Arts & Sciences)				459(11)		600	
Library Science							
Mathematics				55(1)		*	
Military Sciences							
Physical Sciences				67(5)		*	
Psychology				259(5)		*	
Public Affairs & Services						*	
Social Sciences				602(15)			
Civic & Community Affairs							
Interdisciplinary Studies					(*)		
Other Fields							
Occupational Fields of Study							
Data Processing Tech.				14(3)			
Health Services Tech.					(*)		
Mechanical & Engineering Technologies							
Natural Science Tech.							
Business & Commerce Tech.					(*)		
Public Service Related Technologies					(*)		
-Law Enforcement						254	
-Fire Science						400	

a = Lincoln College
b = University College

II.C.3. Part-time Study in Regular Full-time Programs

General Comments

Analysis by Region

Table: Credit Hours Enrollment of Part-time Students in Full-time Programs Offered, Fall 1972, By Subject

II.C.3. Part-time Study in Regular Full-time Programs

General Comments

Throughout the state, few special opportunities exist for part-time study within the regular full-time program. General constraints of limited space and financing tend to inhibit the expenditure of institutional resources on part-time students. Many schools--particularly those in the private sector--limit these part-time offerings to students who are only temporarily reducing their course load but who are primarily full-time students. Other special students, such as those who are taking one or two courses at an institution as part of a cooperative cross-registration arrangement, comprise the remainder of the part-time students in full-time programs at many schools.

Given the limited attention paid to this sort of part-time student (as opposed to the part-time student who falls within the scope of continuing education programs), it is useful to look beyond program availability to determine the scope and comprehensiveness of part-time study opportunities. In theory, the full range of regular institutional program offerings are usually available to part-time students. As noted above, few opportunities are available beyond that. So to compare merely these options ignores the factors that truly determine part-time study, namely, access to these programs.

What factors encourage, hinder, or otherwise affect the possible enrollment of part-time students? Admissions policies, availability of financial aid, tuition costs, willingness of the school to enroll part-time students and the availability of special services all bear on this question of access. The extent of part-time study in full-time programs is a function of these factors and the demand for part-time study in a specific field.

With few exceptions, colleges and universities in Massachusetts follow these policies regarding part-time students in full-time programs:

1) All full-time courses of instruction are open to part-time students, once one is accepted into part-time student status.

2) The total number of part-time students in full-time programs is small, about 13,000 statewide, reflecting the general practice of allowing part-time status as the exdeption rather than the rule in regular full-time programs.

3) The same admissions standards apply to full-time and part-time matriculated degree candidates. This usually means matriculation at the time of entry, in contrast to continuing education programs which usually have open admissions and later matriculation.

4) Schools that allow part-time study on a nonmatriculated basis allow part-time students to enroll on a space-available basis without formal admissions requirements.

5) Costs charged for part-time students at private schools are calculated based on prorated semester tuition rates. Public institutions charge on a credit-hour or course basis that generally results in a higher cost per course for part-time than full-time students.

6) Little or no financial aid is available for part-time students.

7) Few special services such as counseling and advision are provided for part-time students.

8) Most programs in the full-time program are only available in the daytime, which limits the part-time study opportunities to those who are free to take courses during those hours.

9) Although most schools accept CLEP examination credits (up to 30 credit hours), few offer or plan to offer such external learning devices as credit for experience.

One major distinction between public and private schools appears to be operating with regard to part-time students. The private institutions, which often are not filled to capacity in many program areas, often view part-time students as a means to increase enrollments without incurring substantial new costs in terms of faculty pay and other services. Thus, although limited by the high fees they charge these schools allow increased part-time enrollments in full-time programs so long as these programs remain below capacity. Public schools, on the other hand, find that state formulas that provide funding on the basis of number of full-time students rather than on the basis of full-time equivalent students (FTE), make enrollment of part-time students in already crowded full-time programs a drain on resources available for services to full-time students. In these schools, the emphasis on part-time study is found in the division of continuing education rather than as part of the regular full-time programs.

Part-time opportunities in full-time programs of the so-called educational periphery of proprietary institutions are limited in another way. Some programs, such as those in nursing and health services training fields, are generally closed to part-time students. These courses of study require full-time enrollment to achieve the desired certification. Another sort of limitation on part-time study is found in other proprietary schools, which offer night courses (sometimes called continuing education divisions) leading to appropriate certification and subsequent employment. These evening programs cater to the needs of part-time students, but day programs, on the other hand, are designed for full-time attendance aimed at gaining employment upon completion of the program. These schools do not lend themselves to part-time study within such a format, since it would not allow accomplishment of the program's goals. Thus the bulk of part-time students in proprietary school programs are found in a separate evening division rather than as part of a full-time program.

Adult education centers in various municipalities, on the other hand, are primarily designed for short-term study in a particular skill or area of interest. In one sense, these are not really part-time study opportunities in a full-time program, but rather a total part-time program. Thus, they should not be considered here but rather as they relate to continuing education offerings in colleges and universities.

Turning to the availability of opportunities for part-time students at colleges and universities in Massachusetts, we shall proceed to examine, by region, the few special programs that are available. When appropriate, reference will be made to those schools whose policies deviate from the norm described in this section.

WESTERN REGION

The highly competitive picture in continuing education programs in the Springfield-Holyoke area takes on a new dimension when part-time students in full-time programs are considered. The private colleges (Western New England and American International) welcome part-time students in all their programs. They offer a wide variety of degree programs for part-time day study; in some cases, the day program degree is slightly different than that available at night (at Western New England, for example, the daytime degree of B.S. in business administration is offered in contrast to the B.B.A. that is available at night.) Part-time students who desire such degrees, or who cannot attend night classes, can take advantage of the part-time opportunities extended by these schools in their regular full-time programs.

Western New England and American International charge the same fees in regular day programs and at night, the part-time charge amounts to $162 and $168, respectively, per course, which may keep away some potential students. The problem for the public institutions, however, centers around the high demand by full-time students for day programs a at these community colleges (Springfield Tech and Holyoke). Coupled with the funding pressure involved in enrolling part-time students, these schools indicate that opportunities are offered on a part-time basis only when space in a course or program is available. Preference--in terms of services and program offerings--is given to full-time students. That part-time enrollments in none of these schools reaches over 100 students is indicative of the dual constraints of cost incentives and priority facing part-time students in full-time programs.

The only special programs for part-time students in the region are offered by U./Mass.-Amherst. An M.B.A. program in management is given evenings primarily for General Electric employees, at Pittsfield High School. Started in 1959, this degree program has a current enrollment of 33 part-time and 2 full-time students. The cost is high: $195 per course. This program is handled by the regular day division, rather than the division of continuing education, for accreditation purposes.

Despite this offering, U. Mass. generally refers students interested in part-time study to the division of continuing education. Undergraduate part-time students cannot enroll for more than 12 credits unless they matriculate in a degree program. Graduate part-time students may arrange with their departments to apply credits taken as nondegree students toward a U. Mass. degree.

Part-time students at Greenfield Community College and North Adams State College comprise a small segment of the full-time program. There are no special programs for part-time students at these institutions.

CENTRAL REGION

Several private schools in this region have developed specialized offerings for part-time students in full-time programs. Ranging from "mini-courses" to master's degree programs, these special part-time programs have failed to attract large numbers of students. Beyond these programs, Worcester State College, through its newly instituted Extended Learning Program, is taking concrete steps to expand part-time study opportunities in regular full-time programs.

Holy Cross typifies the statewide pattern of limited part-time programs. Space limitations and the high cost of part-time study ($270/course) have kept part-time enrollments at no higher than 35 students per year. On the other hand, Anna Maria College has attempted to attract part-time students through a 50% tuition reduction on late afternoon and evening classes. Though the reduced tuition ($90/course) is higher than that charged by state-supported institutions, it is considerably more attractive than the usual private college fees.

Another approach to reducing part-time study costs was instituted by Leicester Junior College. They run several mini-courses one night a week for five weeks, at a cost of $30 each. These personal interest courses are available to Leicester residents at half price.

Clark University offers an M.B.A. in management program, with a part-time enrollment of about 200, that is conducted at hours that make it accessible to part-time students. Although the cost is $440 per course, it is the only M.B.A. available in the region through either continuing education or specially designed part-time programs.

In conformity to the statewide pattern, the two Central region community colleges (Quinsigamond and Mt. Wachusett) provide few part-time study opportunities in regular full-time programs. The per course fee in both cases is $48 for part-time students, compared to a semester tuition charge of $125. Framingham State offers bachelor's degrees in education through part-time study, but has indicated that no future part-time students are expected because of an administrative decision.

One of the most unusual developments in part-time study opportunities in regular full-time programs has been undertaken by Worcester State College. Its Extended Learning Program, begun in fall 1972, offers an individually tailored part-time program with specialized counseling and advising. After successful completion of 24 semester hours of credit, the Extended Learning Program student has preference for admissions into the regular matriculated program. Although it did not reach capacity in its first semester of operation, the potential for this program is great because of its uniqueness. Worcester State is also planning an upper division undergraduate program which would operate in the evening, with an expected part-time enrollment of 60%. Institution of the program is slated for February 1974, pending the provision of state funding.

NORTHEAST REGION

Two of the largest part-time-in-regular-full-time programs in the state (outside of Boston) are located in this region. Lowell State College operates a graduate program in education which attracts part-time students, most of whom are teachers working for advanced degrees for salary increments or professional advancement. Northeastern University operates a branch campus in Burlington which offers graduate courses in engineering, physics, mathematics, business administration, science, education, and the arts. Programs in electrical engineering, engineering management, and business administration allow part-time study toward master's degrees at Burlington. No degree can be earned solely at Burlington in other fields.

Regarding the Lowell State program, it should be noted that the graduate offerings in education are roughly compared to what is otherwise known as a continuing education division in other state colleges. Started in 1967, these M.Ed. degree programs are funded by the Commonwealth of Massachusetts. The entire program cannot be completed part-time. A one semester residency requirement, however, is usually fulfilled in the summer by part-time students.

Besides the Burlington campus programs, Northeastern operates an M.B.A. program in Nashua, New Hampshire that is readily accessible to Massachusetts part-time students in the Northeast region.

Few undergraduate part-time programs are available. Endicott Junior College initiated a small part-time enrollment effort in fall 1972 which will be evaluated after a trial period. Lowell State does not accept undergraduate part-time students as defined in this study.

Community colleges in the region, like their counterparts across the state, do not offer significant opportunities for part-time students in their full-time programs.

SOUTHEAST REGION

Southeastern Massachusetts University (S.M.U.) has the greatest number of part-time students in full-time programs in this region. But this special student program, which was intended to open S.M.U. courses to area citizens on a space available basis, has become a "backdoor to regular admissions" (just as the continuing education evening divisions of community colleges are also used). S.M.U. and the other colleges and universities in the Southeast Region recognize that many potential part-time students are not being served by the offerings in their full-time programs. However, they indicate that the powerful constraints on such programs, which operate throughout the state, foreclose expansion of part-time offerings within the full-time program (full-time student rather than FTE funding).

The typical pattern for community colleges is to place priority on full-time students, leaving part-time study opportunities to the division of continuing education. These institutions in the Southeast region (Cape Cod, Bristol, and Massasoit) conform to this pattern. Cape Cod reports that it has "no room for part-time students in the day program." Several programs at Bristol--in nursing, child care, dental hygiene, and medical lab technician--are closed to part-time students. Part-time students at Massachusetts Maritime Academy cannot complete program requirements.

Slightly more flexibility is provided by the private schools in the region, but the costs are so high as to be a deterrent for most part-time students. Wheaton College, while hoping to attract such students, realizes that its $300 course fee discourages part-time participation in its programs. Similarly, Dean Junior College indicates a willingness to include more part-time students in its full-time program, and even offers courses to part-time students at a lower cost ($120 vs. $200 per course). But few students enroll part-time in Dean's largely academic areas of instruction. One special part-time program at Dean allows high school seniors to earn college credit. But no special programs are provided for adults seeking part-time enrollment in regular full-time programs.

BOSTON REGION

Roughly half of all part-time students in full-time programs in Massachusetts attend schools in the Boston region. The availability of several graduate-level degrees provided for part-time study is no doubt a significant contributor to this enrollment. Beyond these degree programs, however, part-time study in the Boston region follows statewide trends in several important respects: 1) outside of special part-time degree programs, enrollment of part-time students in full-time programs is low; 2) high costs at the private institutions present an obstacle to more widespread part-time study opportunities in regular full-time programs; and 3) public institutions are deterred from enrolling part-time students in regular full-time programs for financial reasons.

The largest part-time program in the state is offered by the Northeastern University graduate schools of engineering, education, business, liberal arts, pharmacy, and the Boston-Bouvé school. The combined part-time enrollment in these programs in fall 1972 was over 3500. Though considered part-time students in full-time programs,these part-time students outnumber full-time counterparts by about 3 to 1. (For puposes of this study, Northeastern's University and Lincoln Colleges are classified as continuing education programs.)

About 1300 of these part-time students are enrolled in the engineering program. (In addition, 349 students are enrolled part-time in undergraduate engineering courses.)

Part-time students enrolled in the graduate schools of education and business account for the bulk of the remainder of Northeastern's part-time enrollment. The M.B.A. and M.Ed. programs offer many late afternoon and evening courses, placing them in competition with continuing education graduate programs in these fields at Boston State College and Suffolk University (education), and Suffolk, Boston College, and Babson College (business). Sizeable part-time programs at Boston University in these fields are also available. Northeastern's course fees (M.Ed. - \$40/quarter hour and M.B.A. - \$50/quarter hour are substantially higher than Boston State's \$22/credit hour charge. Suffolk and Boston University's fees are slightly lower than that charged by Northeastern, but Boston College charges a somewhat higher rate for its M.B.A. program.

Besides the offerings for part-time students in full-time programs already mentioned, Boston University provides graduate programs in engineering, law, allied health professions, fine arts, arts and sciences, nursing, communications, social work, and theology (nondegree). Most of these enroll few part-time students, although the total part-time headcount numbers 3300. Part-time enrollments are sizeable in education (1762), arts and sciences (482), business (432), fine arts (219), and law (128). (All figures are reported for fall 1972.) The bulk of all Boston University graduate program enrollments, except business administration, are full-time students.

Although it does not provide specific programs for part-time students in regular full-time programs, the Boston College Graduate School of Arts and Sciences has a sizeable part-time enrollment, of which 236 are matriculated degree candidates. The bulk of these are in education, which offers late afternoon classes. The remainder of the graduate program is geared to full-time students. Compared to other graduate programs, the \$75 per credit hour cost fee at Boston College is high. (Boston State's graduate program in education, though considered a continuing education program, offers courses at comparable hours that cost only \$22 per credit hour.) Continuing education graduate programs at Suffolk and Northeastern also charge lower fees than Boston College.

Other graduate programs for part-time students are available in early childhood education (at Wheelock College) and business management (at the Boston College School of Management). The Wheelock program was designed to provide an M.S. in education for liberal arts graduates who desire part-time study prior to entering the field of early childhood education after work in another area. It has an enrollment of 125 part-time students taking late afternoon and early evening classes with full-time students. The program currently has 219 part-time matriculated degree candidates. A new part-time program offered to prisoners is being initiated at U./Mass.-Boston with an initial enrollment of ten students.

Beyond these few special programs, few institutions in the Boston region have undertaken efforts to enroll part-time students in their full-time programs. Many of the colleges and universities are not geared to deal with the different kind of clientele represented by part-time students. High costs for part-time students, sometimes reaching over $300 per course, present a significant obstacle to students seeking access to part-time study in full-time programs. The cost barrier and the high concentration in the region of special divisions of continuing education or evening extension (along with numerous proprietary and adult education opportunities of this sort), have generally relegated part-time study in the full-time program to a minor role in the Boston region's higher education picture.

CREDIT HOURS ENROLLMENT OF PART-TIME STUDENTS IN FULL-TIME PROGRAMS OFFERED FALL, 1972, BY SUBJECT

REGION: WESTERN

BEST COPY AVAILABLE

	HOLYOKE	SPRINGFIELD TECH.	AMERICAN INT.	WESTERN N. ENG.	U. MASS. AMHERST	GREENFIELD C.C.	NORTH ADAMS
Academic Fields of Study							
Agriculture					135		
Architecture							
Area Studies							
Biological Sciences					30		31
Business/Management	71		36	58	226		12
Communications							
Computer/Info. Sciences	7				24		
Education	28	1	23		967		54
Engineering	21			26	76		
Fine & Applied Arts					166		
Foreign Languages					219		
Health Professions	93				82		
Home Economics					94		
Letters (Arts & Sciences)					190		6
Library Science							
Mathematics					39		12
Military Sciences							
Physical Sciences					119		
Psychology				6	68		15
Public Affairs & Services							
Social Sciences				12	172		9
Civic & Community Affairs					4		
Interdisciplinary Studies	7	15					
Other Fields	d	f	125 b	28 a	e	c	
Occupational Fields of Study							
Data Processing Tech.		7				6	
Health Services Tech.		23				14	
Mechanical & Engineering Technologies		7				3	
Natural Science Tech.						12	
Business & Commerce Tech.		15				58	
Public Service Related Technologies						3	
-Law Enforcement	24					60	
-Fire Science							

a - Arts & Sciences Unclassified
b - Liberal Arts
c - Interdisciplinary Studies - 96
Unclassified Enrollment - 87
d - Arts & Sciences - 279
Unclassified - 186
e - Unclassified - 1285
f - Unclassified - 95

BEST COPY AVAILABLE

CREDIT HOURS ENROLLMENT OF PART-TIME STUDENTS IN FULL-TIME PROGRAMS OFFERED FALL, 1972, BY SUBJECT

REGION: CENTRAL

	QUINSIGAMOND	ASSUMPTION	CLARK	HOLY CROSS	WORCESTER POLYT.	ANNA MARIA	LEICESTER JR.	MT. WACHUSETT	FRAMINGHAM STATE
cademic Fields of Study			N.R.	N.R.	N.R.				
Agriculture									
Architecture									
Area Studies									
Biological Sciences									36
Business/Management							9		
Communications									
Computer/Info. Sciences									
Education	8	264				18			408
Engineering	8								
Fine & Applied Arts		195				17		6	4
Foreign Languages		116				6			16
Health Professions									24
Home Economics									36
Letters (Arts & Sciences)		99				3			48
Library Science									
Mathematics						6			4
Military Sciences									
Physical Sciences									4
Psychology		780							64
Public Affairs & Services		228							
Social Sciences		111							28
Civic & Community Affairs		120				93			
Interdisciplinary Studies	c						24	a	
Other Fields						e		b	d
ccupational Fields of Study									
Data Processing Tech.								6	
Health Services Tech.	38								
Mechanical & Engineering Technologies									
Natural Science Tech.									
Business & Commerce Tech.								25	
Public Service Related Technologies									
-Law Enforcement									
-Fire Science									

a - Liberal Arts - 6
General Studies - 30
b - Unclassified (no degree) - 85
c - Unclassified - 30
d - Unclassified - 8
e - Degree credit to other institutions via cross-registration - 32

CREDIT HOURS ENROLLMENT OF PART-TIME STUDENTS IN FULL-TIME PROGRAMS OFFERED FALL, 1972, BY SUBJECT

REGION: NORTHEAST

BEST COPY AVAILABLE

	ENDICOTT	LOWELL STATE
Academic Fields of Study		
Agriculture		
Architecture	1	
Area Studies		
Biological Sciences		
Business/Management	2	
Communications		
Computer/Info. Sciences		
Education	1	2199
Engineering		
Fine & Applied Arts	2	
Foreign Languages		
Health Professions		
Home Economics	1	
Letters (Arts & Sciences)		
Library Science		
Mathematics		
Military Sciences		
Physical Sciences		
Psychology		
Public Affairs & Services		
Social Sciences		
Civic & Community Affairs		
Interdisciplinary Studies	a	
Other Fields		
Occupational Fields of Study		
Data Processing Tech.		
Health Services Tech.		
Mechanical & Engineering Technologies		
Natural Science Tech.		
Business & Commerce Tech.		
Public Service Related Technologies		
-Law Enforcement		
-Fire Science		

a - General Liberal Arts - 2

CREDIT HOURS ENROLLMENT OF PART-TIME STUDENTS IN FULL-TIME PROGRAMS OFFERED FALL, 1972, BY SUBJECT

REGION: SOUTHEAST

BEST COPY AVAILABLE

	STONEHILL	WHEATON	DEAN JR.	BRISTOL C.C.	SOUTHEASTERN MASS	CAPE COD	MASS. MARITIME
Academic Fields of Study							N.R.
Agriculture							
Architecture							
Area Studies							
Biological Sciences		16	4		9		
Business/Management	1050		6	6			
Communications							
Computer/Info. Sciences			6				
Education		8	1	10			
Engineering							
Fine & Applied Arts		40	2		6		
Foreign Languages		12	3				
Health Professions							
Home Economics							
Letters (Arts & Sciences)		8	9				
Library Science							
Mathematics					9		
Military Sciences							
Physical Sciences		24	4		7		
Psychology		20					
Public Affairs & Services							
Social Sciences		4	9				
Civic & Community Affairs		4					
Interdisciplinary Studies							
Other Fields	e			c	d	a	
Occupational Fields of Study						b	
Data Processing Tech.							
Health Services Tech.							
Mechanical & Engineering Technologies							
Natural Science Tech.							
Business & Commerce Tech.				6			
Public Service Related Technologies	720			6			
-Law Enforcement							
-Fire Science							

a - Unclassified liberal arts - 34
b - Unclassified career course - 13
c - General liberal arts - 6
pre-professional - 7
unclassified - 35
d - Unclassified - 502
e - Liberal arts - 882

CREDIT HOURS ENROLLMENT OF PART-TIME STUDENTS IN FULL-TIME PROGRAMS OFFERED FALL, 1972, BY SUBJECT

REGION:BOSTON

BEST COPY AVAILABLE

	U. MASS./BOSTON	EMMANUEL	GARLAND	SIMMONS	WHEELOCK	GRAHM JR.	BOSTON COLLEGE	MT. IDA	TUFTS	BRANDEIS	REGIS	WELLESLEY
Academic Fields of Study				N.R.					N.R.	N.R.		
Agriculture												
Architecture												
Area Studies											8	
Biological Sciences	19						15				24	50
Business/Management						18						
Communications						57						
Computer/Info. Sciences												
Education	9		69		450		1113				220	12
Engineering												
Fine & Applied Arts	220	12						3			32	132
Foreign Languages	291	4					162				32	20
Health Professions							39					
Home Economics			6									
Letters (Arts & Sciences)	655	8					168				52	60
Library Science												
Mathematics	185	4					9				16	4
Military Sciences												
Physical Sciences	52						123				8	32
Psychology	235	12					12				28	40
Public Affairs & Services												
Social Sciences	851.	8					165				68	124
Civic & Community Affairs			13				42					4
Interdisciplinary Studies	36					a						
Other Fields												
Occupational Fields of Study												
Data Processing Tech.												
Health Services Tech.												
Mechanical & Engineering Technologies												
Natural Science Tech.												
Business & Commerce Tech.												
Public Service Related Technologies												
-Law Enforcement												
-Fire Science												

a - Liberal Arts - 6

BEST COPY AVAILABLE

D. Branch Campuses and Satellite Teaching Centers

DISCUSSION. II-333
    Strengths and Weaknesses of Branch Campuses. . . . II-333

1. Table: Off-Campus Activities with Enrollments. Fall 1972 . . . . II-335

2. Map: Off-Campus Activities for Each Institution. . . II-342

BEST COPY AVAILABLE

DISCUSSION OF BRANCH CAMPUSES AND SATELLITE TEACHING CENTERS

In analyzing activities of institutions beyond or outside of their main campus, two types of programs became evident: 1) branch campuses, and 2) satellite teaching centers. For the purposes of this report, a branch campus is defined as a location where the offering of courses is continued over time and is open to a general public. In some cases students may take most or all of their courses required for a degree at a branch campus. A satellite teaching center is defined as a more specific program which may or may not run for several years but is oriented towards a nongeneral clientele such as in-service teachers, law enforcement officers, or a head start program. The general public would be excluded from courses in these centers.

Branch campuses in large numbers are a relatively recent phenomenon; most of the earliest were set up in 1967-68, but the majority in 1971-72. Northeastern started the pattern in the early 1960's, but it now appears that more public institutions than private institutions have branch campuses and satellite teaching centers many of which are located near and competing with older institutions or branch campuses.

There are many purposes: public colleges have vocationally-oriented programs such as in fire science, nursing and other technical programs; private institutions with the exception of Northeastern have these programs to reach disadvantaged populations.

Satellite teaching centers are usually started in response to specific needs of the particular client group involved.

Strengths and weaknesses of branch campuses

There are certain benefits of having branch campuses: First, they bring the services closer to the people and geographic proximity is an important determinant of attendance. Secondly, in the case of in-service satellite teaching centers, it is easy for students to incorporate work and classroom time. Also, some of the community colleges have built new campuses away from the cities and centers of populations so that the only people they can serve are those who have private automobiles. There should be a central city branch campus for those residents who have only public transportation access, e.g. Fall River.

The dangers of opening branch campuses are that they will attract students from other schools through "skimming" the high enrollment, profitable courses, and will upset the balance of institutions in the area. Institutions may open a branch campus in a different area and offer three or four general lower division courses and attract many students at a low price. Other institutions in the area with a balanced program may suffer, as they need these lower division enrollments in making a subsidy of the more expensive upper division programs. Schools may try to initiate programs in situations where they do not need approval from the B.H.E.

BEST COPY AVAILABLE

II.D.1. Tables

OFF CAMPUS ACTIVITIES WITH ENROLLMENTS, FALL 1972

WESTERN REGION

SCHOOL:	Branch/ Location	Description	degree	year started	# courses	# enrollments	cooperative	Branch campus-satellite teaching center
American International*	Westover Air Force Base	Undergraduate courses	BA (Lib. Arts) Bus. Admin.	1961	17	294	X	B.C.
Western N.E.*	Westover Air Force Base	MBA Program	MBA	1967	6	60-90	X	B.C.
Springfield Tech. C. C.	Palmer H. S.	accounting course	Discontinued	1971		NR		S.T.C.
	Westover Air Force Base	Fire Science Program Specific group	A.S./ A.A. 50%	1971	1	27	X	B.C.
	Springfield Hospital	Nursing Program Specific group	A.A./ A.S. 30%	1971	5	90	X	B.C.
North Adams State* C.E.	Berkshire Country Day School Lenox	CE courses offered only in summer Senior citizens	no degree 0%	1967		759	X	B.C.
	St. Luke's School of Nursing	course in developmental psychology			1	47	X	S.T.C.
Holyoke C. C. C.E.	Westover Air Force Base	Law Enforcement Program	A.S. 50%	1971	1	32	X	B.C.
	Berkshire C.C.	Corrections Program	A.S. 50%	1972	1	23	X	S.T.C.
	Wistariahurst Museum Holyoke	Cultural Series		1972	2	50	X	S.T.C.
	Acme Chain Co. Holyoke	Supervisory Seminar		1972	1	20		S.T.C.
Greenfield C. C.* C.E.	Union Twist Drill Athol	Classes in indus. tech. apprentices of the Union Twist Drill	A.S. 25%	Fall 1968		15	X	S.T.C.

---

*for year

BEST COPY AVAILABLE

OFF CAMPUS ACTIVITIES WITH ENROLLMENTS, FALL 1972

WESTERN REGION, cont'd.

SCHOOL:	Branch/ Location	Description	degree	year started	# courses	# enrollments	cooperative	Branch campus-satellite teaching center
UMASS. - AMHERST PT	Pittsfield H.S.	M.B.A. prog. (GE employees)	M.B.A. 100%	1959		35	X	S.T.C.
CE	Career Opportunity Program	Career opportunity prog.	BA	1971				
	Worcester	open enrollment	100%			59	X	--
	Springfield					43	X	--
	Brooklyn, N.Y.					199	X	--
	Westover Air Force Base	Education Management	M.Ed.	1970		24		B.C.
	Concord/Carlisle	grad. & undergrad. courses in education open enrollment	MA 100%	1972		98		B.C.
	Greenfield	Green River Project--study Green River pollution		1972		25		S.T.C.
	Amherst H.S.	O.J.T. new career training		1972		10	X	S.T.C.
WESTFIELD STATE	Westover Air Force Base	Guidance/ Counseling		1972	2	42	X	B.C.
	Greenfield	Eng. Comp.I In service teachers		1972	1	20	X	S.T.C.
	Holyoke	Teaching Eng. as 2nd lang.		1971	1	4	X	S.T.C.
	Sheffield	Spec. Schema in Reading		1972	2	24	X	S.T.C.
	Springfield	Intro. to Occupational Ed rec. by Model Cities	MEd in Urban Ed. 100%	1972	1	12	X	S.T.C.
	Turners Falls School System	Ed'l. Issues in Extreme Lrng. Disabilities		1972	2	40	X	S.T.C.
	Holyoke Model Cities	Ed. in Urban Education	M.Ed.	1972	2	48	X	S.T.C.

BEST COPY AVAILABLE

OFF CAMPUS ACTIVITIES WITH ENROLLMENTS, FALL 1972

CENTRAL REGION

SCHOOL:	Branch/ Location	Description	degree	year started	# courses	# enrollments	cooperative	Branch campus-satellite teaching center
MT. WACHUSETT C.C. CE	Fort Devens	CE courses		1966	12	274	X	B.C.
	Athol H.S.			1971	5	68	X	S.T.C.
	Nashoba Reg.HS (Boston)			1972	10	147	X	S.T.C.
WORCESTER STATE CE	conducted periodically							
FITCHBURG STATE CE	Andover Voc. Worcester Voc. Canton Voc. Fall River Voc.	B.S. in Voc. Ed.	B.S.	1932	49	668	X	S.T.C.
	Industrial Arts Teachers[1]	certification program		Sp. 68	13	128	X	S.T.C.
	Joint with Merrimack Ed. Centers	In service for teachers in membership towns		Fall 71	8	166	X	S.T.C.
QUINSIGAMOND C.C.	Southbridge	CE		1969	12	100		B.C.
	Blackstone	CE		1971	12	100		B.C.
	various mfg. plants	Industrial mngt.		1969		110	X	S.T.C.
	State Mutual Life Ins. Co.	in service courses	future-(2 yr. degree in Bus. Admin.	1972		45	X	S.T.C.
	Worcester Police Dept.	police seminars		1972		400	X	S.T.C.
	Fed. funded agencies	contract courses		1968		10-25	X	S.T.C.
FRAMINGHAM STATE CE	Framingham Civic League	undergrad. day offerings		Fall 1972	4	120	X	B.C.
	Medfield State Hospital			Fall 1972	[illegible]	130	X	S.T.C.
	Marist Campus	conference/ workshop institutes		Fall 1972		varied	X	S.T.C.
ANNA MARIA COLLEGE CE	St. Vincent Hospital -- Worcester	B.S. in health studies	complete B.S.			52	X	B.C.
ASSUMPTION PT	Eagle Hill School	In service training for teachers		NR		15	X	S.T.C.
WORCESTER POLYTECHNICAL INSTITUTE	Honeywell Corp. (Wellesley)				1	NR	X	S.T.C.
	American Optical (Framingham)			NR	4		X	S.T.C.
	Digital Equip. Corp.				1		X	S.T.C.
	Sanders Assoc. Nashua N.H.				3		X	S.T.C.

[1] Roxbury Shaw J.H.
Adams J.H.
Framingham H.S.
Brockton H.S.
Lowell H.S.
Roch. H.S.
Weston H.S.
Springfield Tech. H.S.
Auburn H.S.
Curley J.H. (Jamaica Pln.)
Reading H.S.
Stoughton H.S.
Mattapoisett
Planetarium (Fitchburg)

BEST COPY AVAILABLE

OFF CAMPUS ACTIVITIES WITH ENROLLMENTS, FALL 1972

NORTHEAST REGION

SCHOOL:	Branch/ Location	Description	degree	year started	# courses	# enrollments	cooperative	Branch campus-satellite teaching center
North Shore C.C.	Lynn, Mass.	reg. programs	Assoc. 90%	F.72	21	600	--	B.C.
	Malden	reg. programs	Assoc. 90%	F.70	15	400	--	B.C.
	Gloucester	reg. programs	Assoc. 90%	F.69	8	175	--	B.C.
	Danvers	reg. programs	Assoc. 90%	Sp.71	7	200	--	B.C.
Middlesex C. C.	Bedford	Marist Ext. Ctr.-adult day program for women selected by Co. or agency	25%	Sept. 72	6	100	X	B.C.
	Arlington	Ext. Ctr. any qualified student	40% to 75%	Sept. 71	4	120		B.C.
	Woburn	Ext. Ctr. any qualified student		Feb. 71	4	60		B.C.
	Hanscom Medford	Ext. Ctr. any qualified student		Feb. 71	3	60		B.C.
	Lexington	Ext. Ctr.		Sept. 71	3	60		B.C.
	Boston	A.B.C.D. Ext. Ctr. (degree) selected by Co. or agency	X 100% possible 75% probable	Sept. 71	24	210		B.C.
	Cambridge	Headstart selected by Co. or agency		1972		25	X	S.T.C.
	Cambridge	Community Language Ctr. selected by Co. or agency	20%-40% in future	1972		25	X	S.T.C.
	Lowell	Headstart selected by Co. or agency	50%	1970		25	X	S.T.C.
	Lowell	New Careers selected by Co. or agency		1970		75	X	S.T.C.
	Lowell	Model Cities selected by Co. or agency		1970		25	X	S,T.C
	Lexington	St. Brigid's Parish selected by Co. or agency	25%	1971		65	X	S.T.C.
Lowell Tech*	Western Elect No. Andover	Employer Training employees only	0%	1969		50		S.T.C.

BEST COPY AVAILABLE

OFF CAMPUS ACTIVITIES WITH ENROLLMENTS, FALL 1972

SOUTHEAST REGION

SCHOOL:	Branch/ Location	Description	degree	year started	# courses	# enrollments	cooperative	Branch campus-satellite teaching center
Bridgewater C.E.	Hyannis Summer School	Regular CE		1944	15	246	X	B.C.
Massasoit	Plymouth Bridgewater Mass. Correctional Institute	Correctional rehabilitation education Assist.		1972-73		75-100	X	S.T.C.
	Brockton	Ed. assist. to elderly		1972		100	X	S.T.C.
	W. Bridgewater	full courses		1970		650 f.t.	X	B.C.
	Mirmer-Duxbury			[illegible]		850	X	B.C.
Bristol C.C.*	Attleboro H.S.	credit courses	All credit courses can be credited toward degree. But because of limited # of courses, difficult to earn degree off campus.	Sp.[illegible]	[illegible]-10	52-145	X	S.T.C.
	New Bedford H.S.	both for qualified students and for specific groups		Sp.70-Sp.72	4	49-74	X	S.T.C.
	Taunton Regional Vocational H.S.			F.72	5	92	X	S.T.C.
	King Phillip Regional H.S. (Wrentham)			F71-F72	3-4	21-79	X	S.T.C.
	Norfolk State Prison with STEP			F71	5-6	50-60	X	S.T.C.
	South End Center Fall River	GED class						
	Storefront Fall River	ESL-Reading						

*for year

BEST COPY AVAILABLE

OFF CAMPUS ACTIVITIES WITH ENROLLMENTS, FALL 1972

BOSTON REGION

SCHOOL:	Branch/ Location	Description	degree	year started	# courses	# enrollments	cooperative	Branch campus-satellite teaching center
Boston State	Blue Hills	undergrad. ed. courses	25%	1972	2	70	X	S.T.C.
	Arlington	grad. ed. courses w/ Middlesex C.C.	1/3	1972	4	140	X	S.T.C.
	Medford	undergrad. ed. courses		1973	10	250	X	S.T.C.
	S. Boston	H.S.	25%	1973	2-3	60	X	S.T.C.
Suffolk University*	Western Electric N.Ardmore, Mass.		MBA MS		10	80	X	B.C.
Lesley*	on the Cape	in-service training				37	X	S.T.C.
	Boston	in-service training				9	X	S.T.C.
	Cambridge	Child growth and devel. central sch.				6	X	S.T.C.
Harvard	Roxbury	Roxbury Prog.		1968	6*	88		B.C.
	Boston	Old South Meeting Hse. Amer. Subj.			3	271		B.C.
	New London Newport	PACE Prog. (w/Navy)			43*	519	X	B.C.
	Providence, R.I.	Black Experience in Am.				24*	X	S.T.C.
	Cambridge	Model Cities (Spanish)				32*	X	S.T.C.
		Cambridge Econ. Opportunities Comm.			3	110*	X	S.T.C.
Quincy Jr. College for fall, 1973	Hanover H.S.	toward A.A.or A.S.			5			B.C.
	Hingham H.S.	toward A.A.or A.S.			4			B.C.
	Scituate H.S.	toward A.A.or A.S.			4			B.C.
	Silver Lake Regional H.S.	toward A.A.or A.S.			5			B.C.
	Weymouth Naval Air Station	toward A.A.or A.S.			5			B.C.

*for year

BEST COPY AVAILABLE

OFF CAMPUS ACTIVITIES WITH ENROLLMENTS, FALL 1972

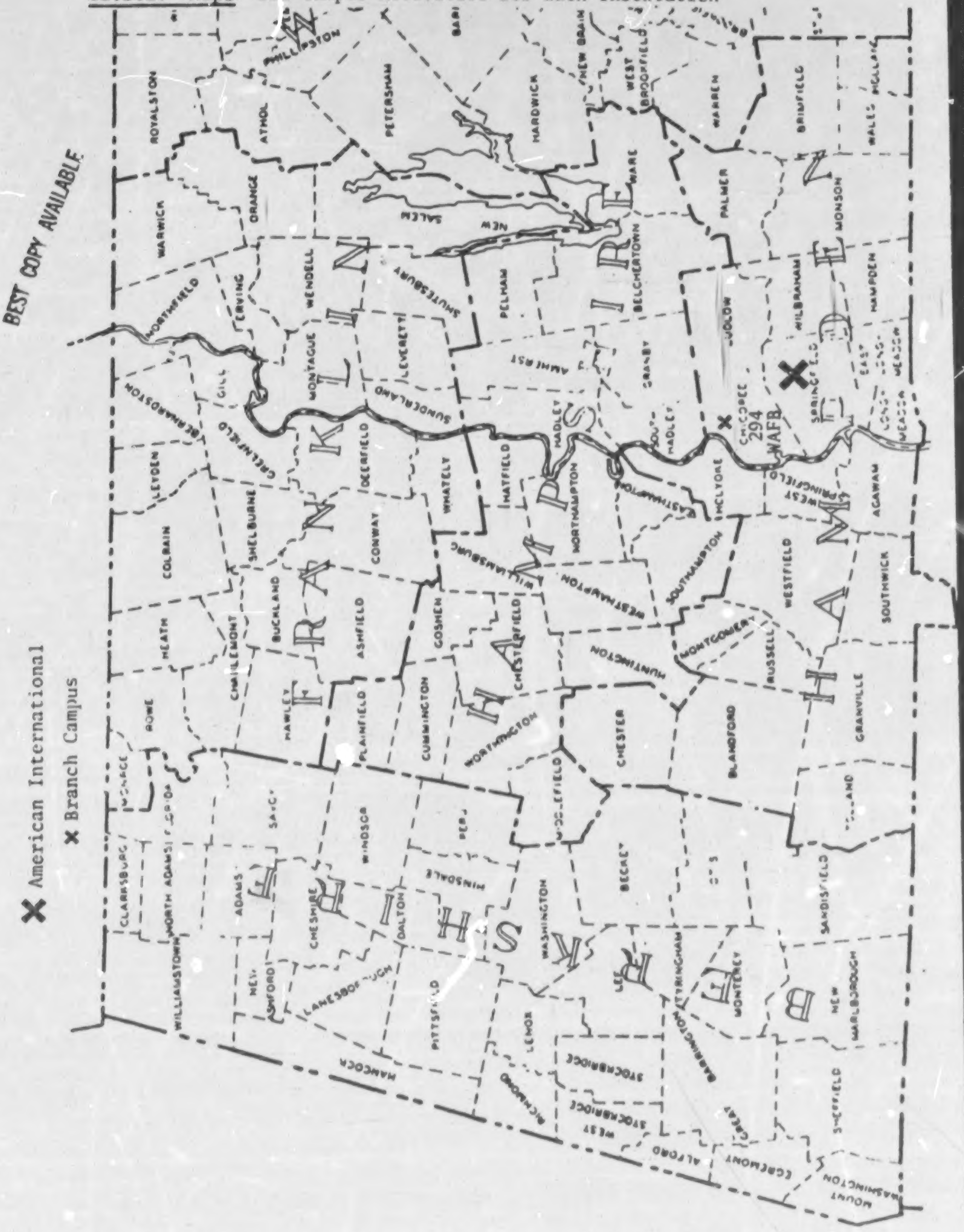
BOSTON REGION, cont'd.

SCHOOL:	Branch/ Location	Description	degree	year started	# courses	# enrollments	cooperative	Branch campus-satellite teaching center
Northeastern	Burlington		MBA	1964	Univ.& Lincoln 320	regis. 9600		B.C.
	Framingham		MBA	1965-67	76	1982		B.C.
	Haverhill				30	476		B.C.
	Lynn				42	767		
	Weymouth				78	1982		B.C.
	Norwood				27	508		B.C.
	Ashland			1968	10			B.C.
	Nashua, N.H.		MBA			78		B.C.
	Weston			1964				B.C.
	Marshfield	Law Enforcement		1971	4	100		S.T.C.
	Harvard U.	Law Enforcement		1964	1	18		S.T.C.
	Bridgewater	Law Enforcement		1967	2	46		S.T.C.
	Bourne	Law Enforcement		1963	4	73		S.T.C.
	Ayer	Law Enforcement		1963	2	40		S.T.C.
U./Mass. -Boston	various field sites	training programs-institutes		Sept. 1970		880	X	S.T.C.
Mass. Bay C.C.*	various locations	Law Enforcement in service all qualified students	none	1970	2	50		S.T.C.
		Business Adm. all qualified students	75%	1970	30	376		S.T.C.

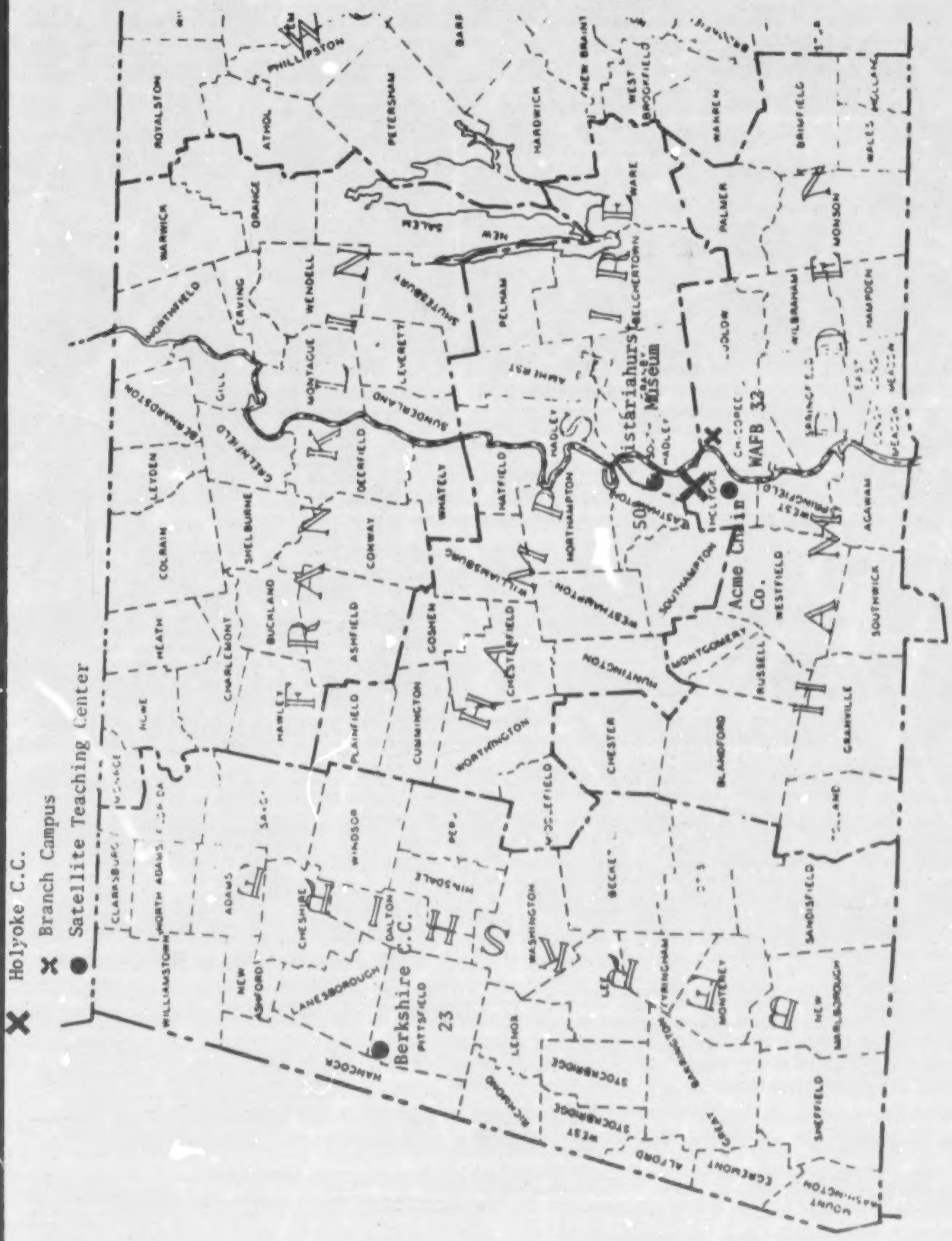
*for year

II.D.2. **Maps**. Off-Campus Activities for Each Institution

BEST COPY AVAILABLE


✖ American International
× Branch Campus
FRANKLIN
HAMPSHIRE
HAMPDEN
BERKSHIRE
CHICOPEE
294
WAFB
ROYALSTON
PHILLIPSTON
ATHOL
PETERSHAM
HARDWICK
NEW BRAINTREE
WEST BROOKFIELD
WARREN
BRIMFIELD
WALES
HOLLAND
WARWICK
ORANGE
SALEM
NEW
WARE
PALMER
MONSON
NORTHFIELD
ERVING
WENDELL
SHUTESBURY
PELHAM
BELCHERTOWN
LUDLOW
WILBRAHAM
HAMPDEN
EAST LONGMEADOW
BERNARDSTON
GILL
MONTAGUE
LEVERETT
AMHERST
GRANBY
SPRINGFIELD
LONGMEADOW
SUNDERLAND
HADLEY
SOUTH HADLEY
LEYDEN
GREENFIELD
DEERFIELD
WHATELY
HATFIELD
NORTHAMPTON
EASTHAMPTON
HOLYOKE
WEST SPRINGFIELD
AGAWAM
COLRAIN
SHELBURNE
CONWAY
WILLIAMSBURG
SOUTHAMPTON
WESTFIELD
SOUTHWICK
HEATH
CHARLEMONT
BUCKLAND
ASHFIELD
GOSHEN
CHESTERFIELD
WESTHAMPTON
HUNTINGTON
MONTGOMERY
RUSSELL
GRANVILLE
ROWE
HAWLEY
PLAINFIELD
CUMMINGTON
WORTHINGTON
CHESTER
BLANDFORD
MONROE
FLORIDA
SAVOY
WINDSOR
PERU
MIDDLEFIELD
BECKET
TOLLAND
CLARKSBURG
NORTH ADAMS
ADAMS
CHESHIRE
HINSDALE
DALTON
WASHINGTON
SANDISFIELD
WILLIAMSTOWN
NEW ASHFORD
LANESBOROUGH
PITTSFIELD
LENOX
LEE
TYRINGHAM
MONTEREY
NEW MARLBOROUGH
HANCOCK
RICHMOND
STOCKBRIDGE
WEST STOCKBRIDGE
GREAT BARRINGTON
SHEFFIELD
ALFORD
EGREMONT
MOUNT WASHINGTON

BEST COPY AVAILABLE

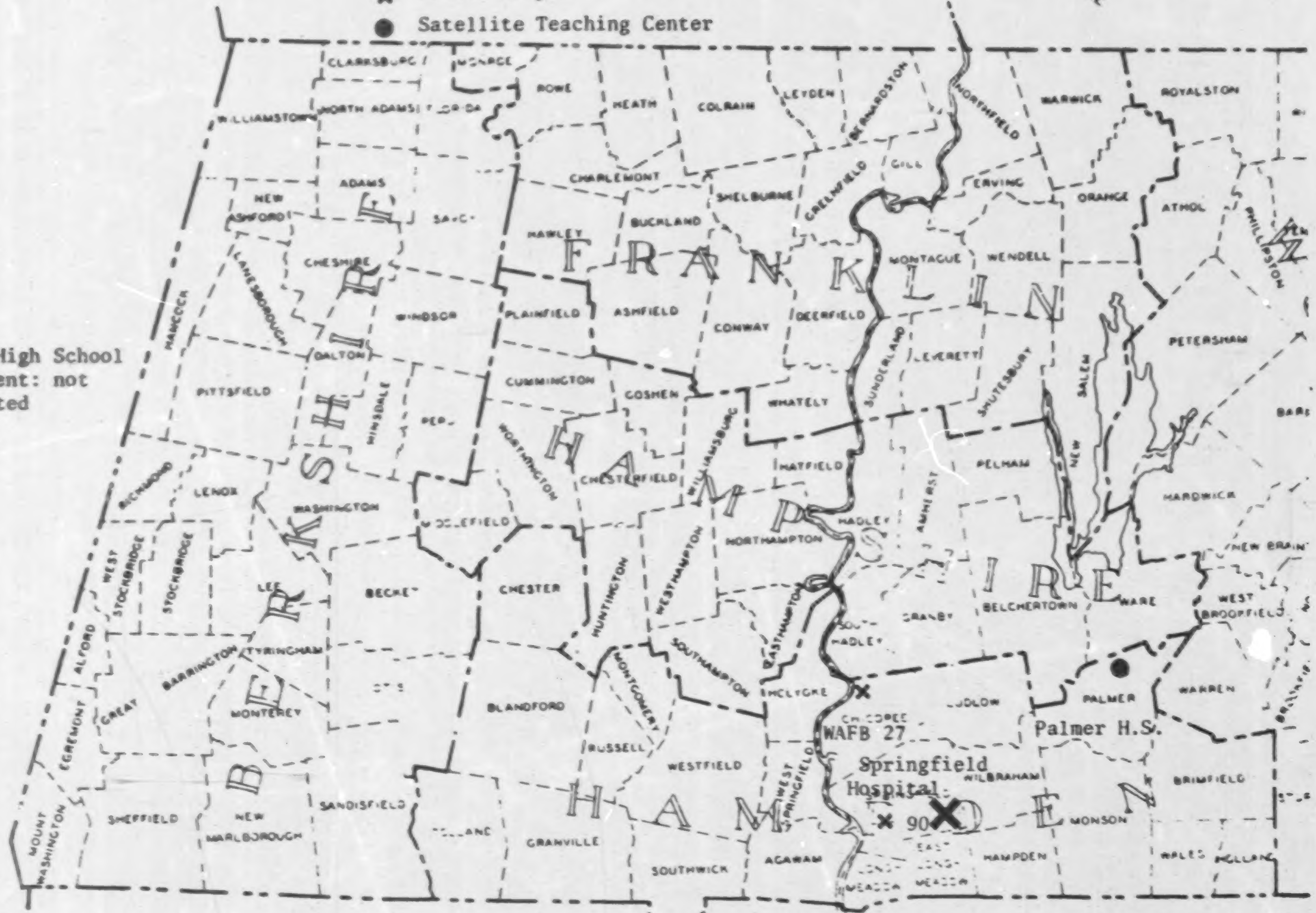

✕ Holyoke C.C.
× Branch Campus
● Satellite Teaching Center
FRANKLIN
HAMPSHIRE
HAMPDEN
BERKSHIRE
Berkshire C.C.
23
Wistariahurst Museum
50
Acme Chain Co.
WAFB 32
ROYALSTON
PHILLIPSTON
ATHOL
PETERSHAM
BARRE
HARDWICK
NEW BRAINTREE
WEST BROOKFIELD
WARREN
BRIMFIELD
WALES
HOLLAND
WARWICK
ORANGE
SALEM
NEW SALEM
WARE
PALMER
MONSON
NORTHFIELD
ERVING
WENDELL
SHUTESBURY
PELHAM
BELCHERTOWN
LUDLOW
WILBRAHAM
HAMPDEN
GILL
MONTAGUE
LEVERETT
AMHERST
GRANBY
SPRINGFIELD
EAST LONGMEADOW
LONGMEADOW
BERNARDSTON
GREENFIELD
SUNDERLAND
HADLEY
SOUTH HADLEY
CHICOPEE
LEYDEN
DEERFIELD
HATFIELD
HOLYOKE
WEST SPRINGFIELD
AGAWAM
COLRAIN
SHELBURNE
CONWAY
WHATELY
NORTHAMPTON
EASTHAMPTON
SOUTHAMPTON
WESTFIELD
SOUTHWICK
HEATH
CHARLEMONT
BUCKLAND
ASHFIELD
GOSHEN
WILLIAMSBURG
WESTHAMPTON
MONTGOMERY
RUSSELL
GRANVILLE
ROWE
HAWLEY
PLAINFIELD
CUMMINGTON
CHESTERFIELD
HUNTINGTON
WORTHINGTON
CHESTER
BLANDFORD
TOLLAND
CLARKSBURG
MONROE
FLORIDA
SAVOY
WINDSOR
PERU
MIDDLEFIELD
BECKET
OTIS
SANDISFIELD
NORTH ADAMS
ADAMS
CHESHIRE
HINSDALE
WASHINGTON
DALTON
WILLIAMSTOWN
NEW ASHFORD
LANESBOROUGH
PITTSFIELD
LENOX
LEE
TYRINGHAM
MONTEREY
NEW MARLBOROUGH
HANCOCK
RICHMOND
STOCKBRIDGE
WEST STOCKBRIDGE
GREAT BARRINGTON
SHEFFIELD
ALFORD
EGREMONT
MOUNT WASHINGTON

BEST COPY AVAILABLE

✖ Springfield Tech C.C.

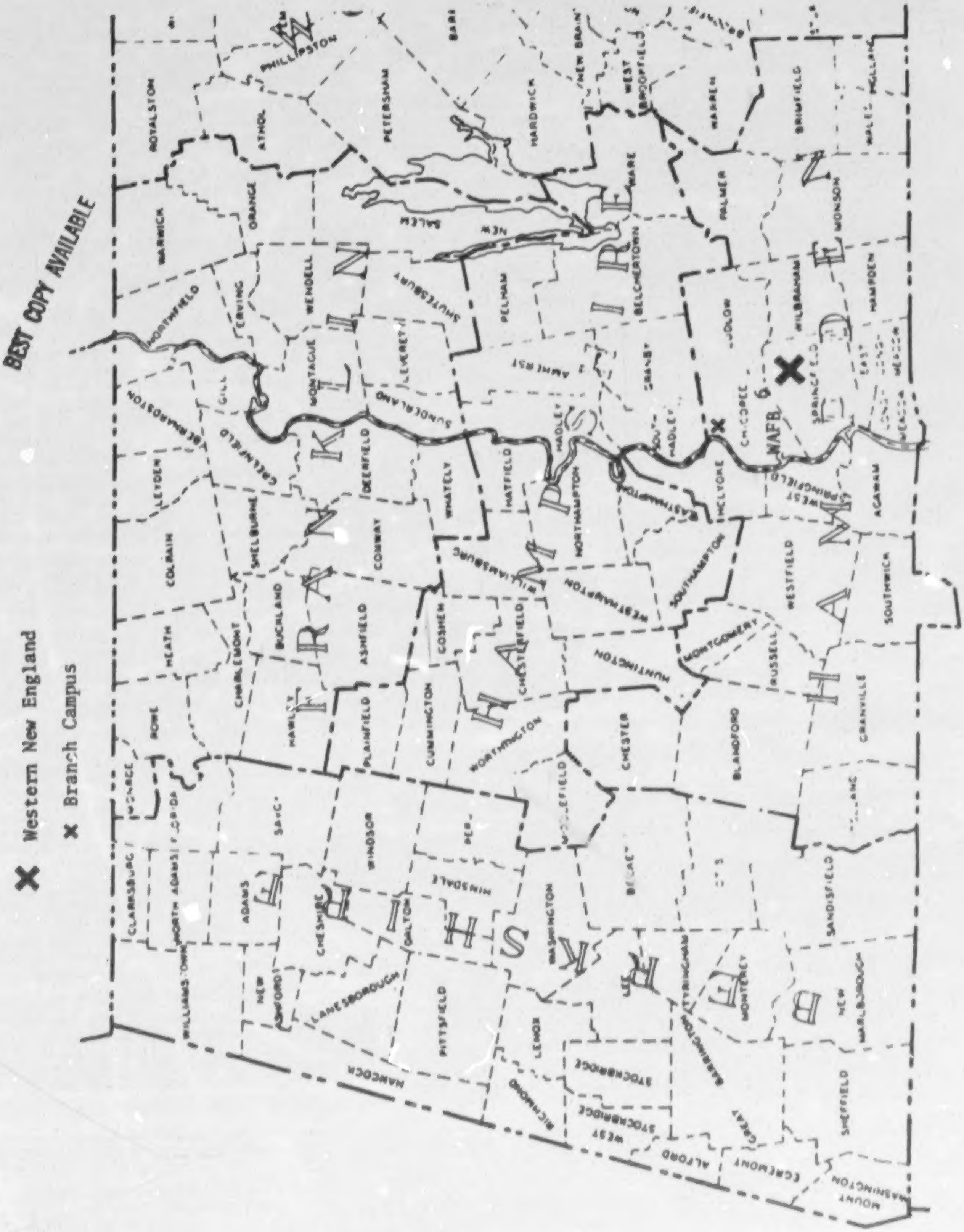
× Branch Campus

● Satellite Teaching Center

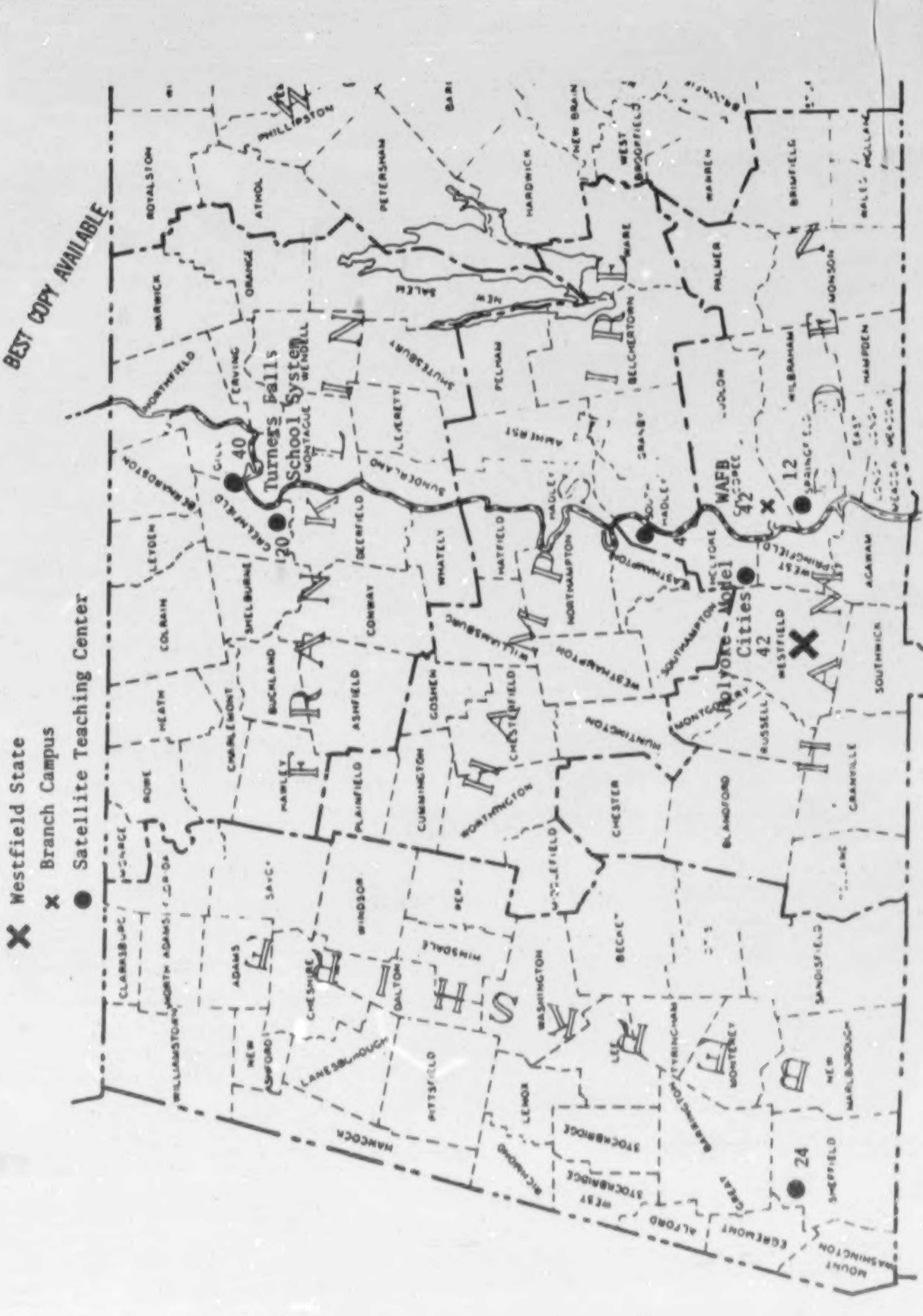

FRANKLIN
HAMPSHIRE
BERKSHIRE
HAMPDEN
WAFB 27
Springfield Hospital
90
Palmer H.S.
CLARKSBURG
MONROE
ROWE
HEATH
COLRAIN
LEYDEN
BERNARDSTON
NORTHFIELD
WARWICK
ROYALSTON
WILLIAMSTOWN
NORTH ADAMS
FLORIDA
CHARLEMONT
GILL
ERVING
ORANGE
ATHOL
PHILLIPSTON
ADAMS
NEW ASHFORD
SAVOY
HAWLEY
BUCKLAND
SHELBURNE
GREENFIELD
MONTAGUE
WENDELL
CHESHIRE
LANESBOROUGH
WINDSOR
PLAINFIELD
ASHFIELD
CONWAY
DEERFIELD
LEVERETT
SHUTESBURY
PETERSHAM
HANCOCK
DALTON
PITTSFIELD
HINSDALE
PERU
CUMMINGTON
GOSHEN
WHATELY
SUNDERLAND
NEW SALEM
BARRE
RICHMOND
LENOX
WASHINGTON
WORTHINGTON
CHESTERFIELD
WILLIAMSBURG
HATFIELD
PELHAM
HARDWICK
MIDDLEFIELD
HADLEY
AMHERST
NORTHAMPTON
NEW BRAINTREE
WEST STOCKBRIDGE
STOCKBRIDGE
LEE
BECKET
CHESTER
HUNTINGTON
WESTHAMPTON
EASTHAMPTON
BELCHERTOWN
WARE
WEST BROOKFIELD
ALFORD
GREAT BARRINGTON
TYRINGHAM
OTIS
SOUTHAMPTON
SOUTH HADLEY
GRANBY
EGREMONT
MONTEREY
BLANDFORD
MONTGOMERY
HOLYOKE
LUDLOW
PALMER
WARREN
BRIMFIELD
RUSSELL
WESTFIELD
CHICOPEE
WILBRAHAM
MOUNT WASHINGTON
SHEFFIELD
NEW MARLBOROUGH
SANDISFIELD
TOLLAND
GRANVILLE
SOUTHWICK
AGAWAM
WEST SPRINGFIELD
LONGMEADOW
EAST LONGMEADOW
HAMPDEN
MONSON
WALES
HOLLAND

● Palmer High School Enrollment: not reported

BEST COPY AVAILABLE

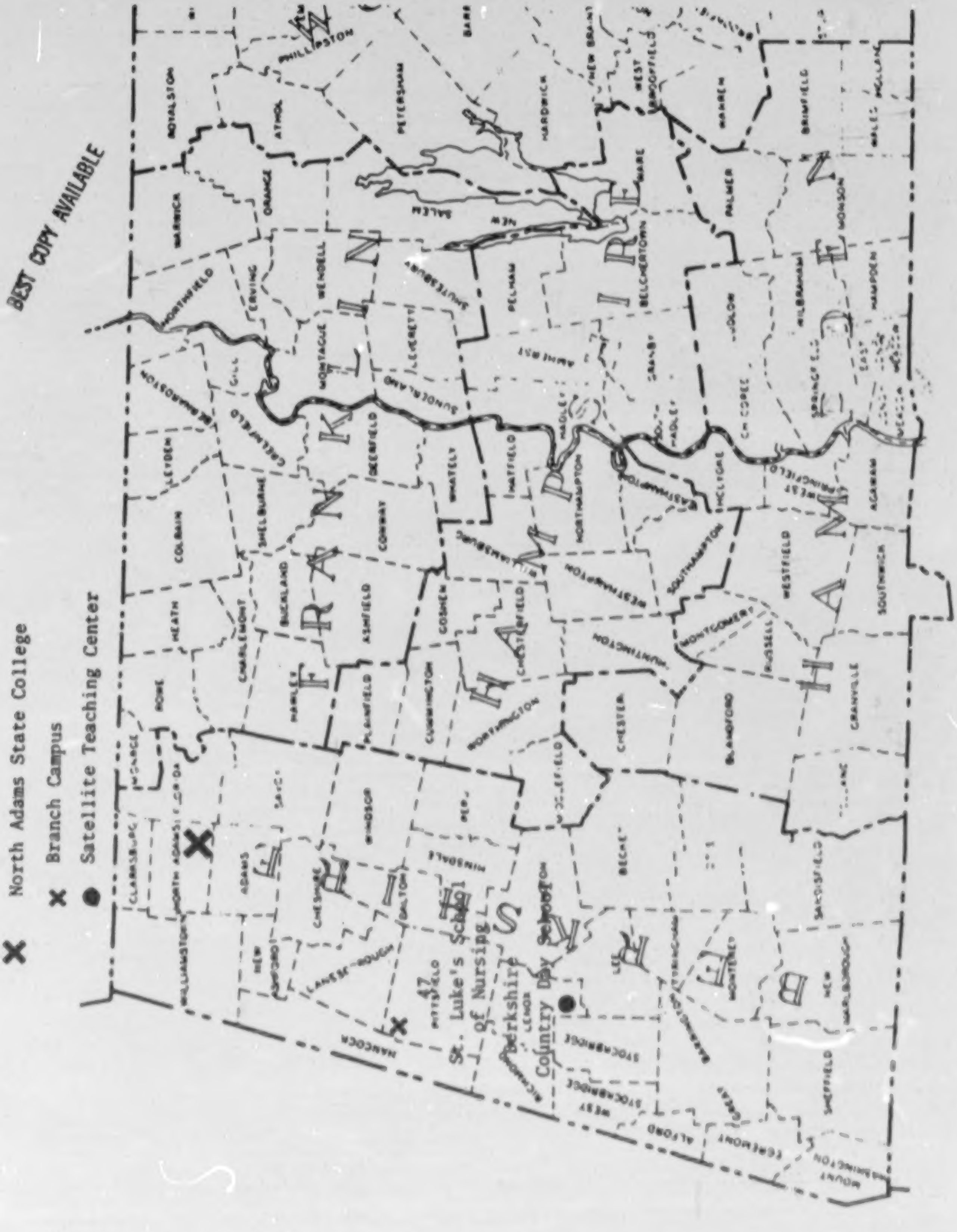

✖ Western New England
× Branch Campus
FRANKLIN
HAMPSHIRE
HAMPDEN
BERKSHIRE
ROYALSTON
PHILLIPSTON
PETERSHAM
BARRE
HARDWICK
NEW BRAIN
WEST BROOKFIELD
WARREN
BRIMFIELD
HOLLAND
WALES
MONSON
PALMER
WARE
ATHOL
ORANGE
WARWICK
NORTHFIELD
ERVING
WENDELL
NEW SALEM
SHUTESBURY
PELHAM
BELCHERTOWN
AMHERST
GRANBY
LUDLOW
WILBRAHAM
HAMPDEN
EAST LONGMEADOW
SPRINGFIELD
LONGMEADOW
CHICOPEE
WNAFB
SOUTH HADLEY
HOLYOKE
HADLEY
LEVERETT
MONTAGUE
GILL
BERNARDSTON
LEYDEN
GREENFIELD
SUNDERLAND
DEERFIELD
WHATELY
HATFIELD
NORTHAMPTON
EASTHAMPTON
WEST SPRINGFIELD
AGAWAM
COLRAIN
SHELBURNE
CONWAY
WILLIAMSBURG
WESTHAMPTON
SOUTHAMPTON
WESTFIELD
SOUTHWICK
HEATH
CHARLEMONT
BUCKLAND
ASHFIELD
GOSHEN
CHESTERFIELD
HUNTINGTON
MONTGOMERY
RUSSELL
GRANVILLE
ROWE
HAWLEY
PLAINFIELD
CUMMINGTON
WORTHINGTON
CHESTER
BLANDFORD
MONROE
FLORIDA
SAVOY
WINDSOR
PERU
MIDDLEFIELD
BECKET
TOLLAND
CLARKSBURG
NORTH ADAMS
ADAMS
CHESHIRE
DALTON
HINSDALE
WASHINGTON
OTIS
SANDISFIELD
WILLIAMSTOWN
NEW ASHFORD
LANESBOROUGH
PITTSFIELD
LENOX
LEE
TYRINGHAM
MONTEREY
NEW MARLBOROUGH
HANCOCK
RICHMOND
STOCKBRIDGE
WEST STOCKBRIDGE
GREAT BARRINGTON
SHEFFIELD
ALFORD
EGREMONT
MOUNT WASHINGTON

BEST COPY AVAILABLE

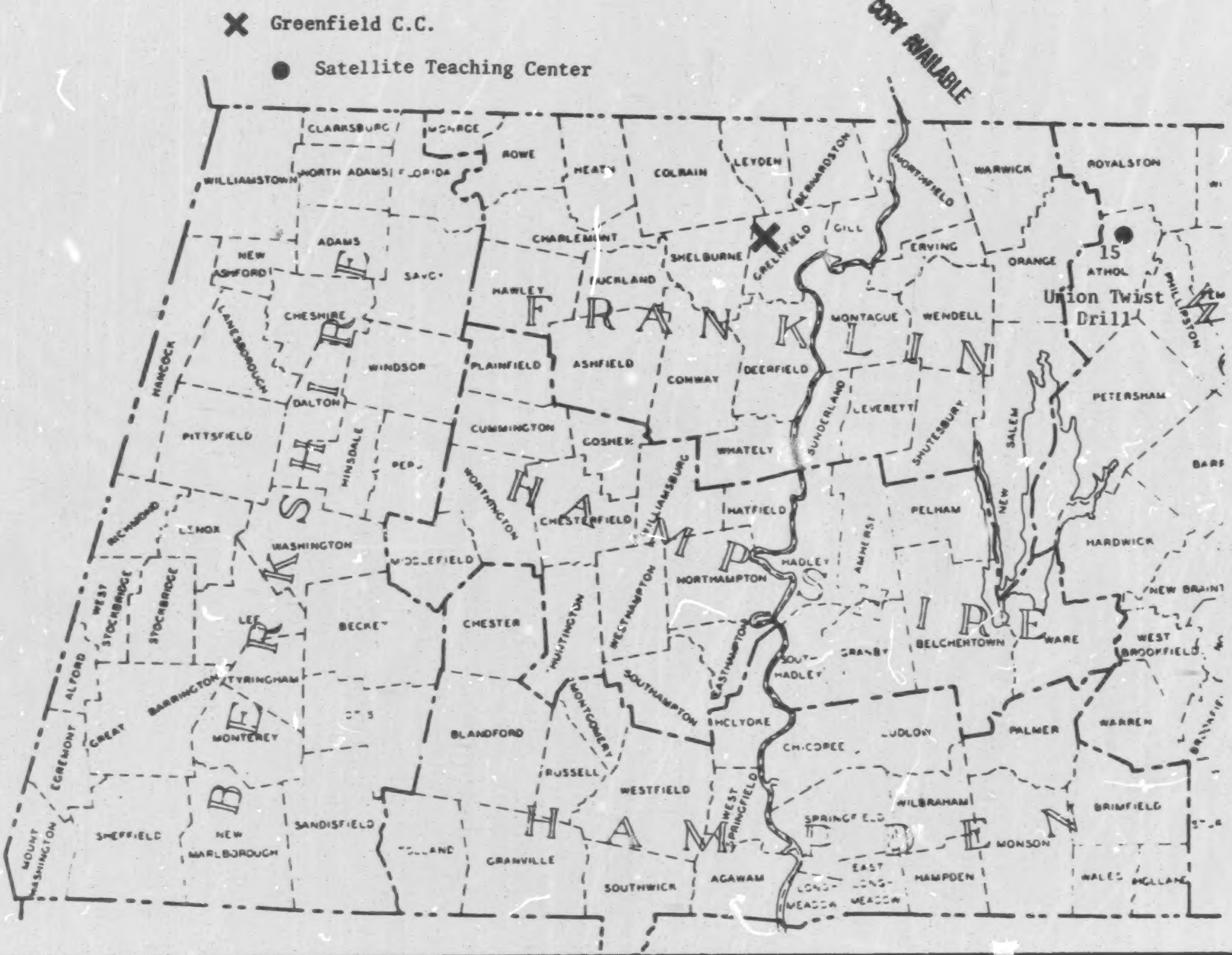


✕ Westfield State
× Branch Campus
● Satellite Teaching Center
FRANKLIN
HAMPSHIRE
HAMPDEN
BERKSHIRE
Turners Falls School System
40
20
Holyoke Model Cities
42
WAFB
42
12
24
ROYALSTON
WARWICK
NORTHFIELD
BERNARDSTON
LEYDEN
COLRAIN
HEATH
ROWE
MONROE
CLARKSBURG
NORTH ADAMS
WILLIAMSTOWN
PHILLIPSTON
ATHOL
ORANGE
ERVING
GILL
GREENFIELD
SHELBURNE
CHARLEMONT
BUCKLAND
HAWLEY
FLORIDA
SAVOY
ADAMS
NEW ASHFORD
CHESHIRE
LANESBOROUGH
HANCOCK
PETERSHAM
WENDELL
MONTAGUE
DEERFIELD
CONWAY
ASHFIELD
PLAINFIELD
WINDSOR
DALTON
PITTSFIELD
HINSDALE
PERU
CUMMINGTON
GOSHEN
WILLIAMSBURG
WHATELY
SUNDERLAND
LEVERETT
SHUTESBURY
NEW SALEM
SALEM
HARDWICK
BARRE
NEW BRAINTREE
WEST BROOKFIELD
WARE
PELHAM
AMHERST
HADLEY
HATFIELD
NORTHAMPTON
WESTHAMPTON
CHESTERFIELD
WORTHINGTON
MIDDLEFIELD
WASHINGTON
LENOX
RICHMOND
STOCKBRIDGE
WEST STOCKBRIDGE
LEE
BECKET
CHESTER
HUNTINGTON
MONTGOMERY
SOUTHAMPTON
EASTHAMPTON
SOUTH HADLEY
GRANBY
BELCHERTOWN
PALMER
WARREN
BRIMFIELD
WALES
HOLLAND
MONSON
WILBRAHAM
HAMPDEN
LUDLOW
CHICOPEE
HOLYOKE
WEST SPRINGFIELD
SPRINGFIELD
EAST LONGMEADOW
LONGMEADOW
AGAWAM
WESTFIELD
SOUTHWICK
RUSSELL
BLANDFORD
GRANVILLE
TOLLAND
OTIS
SANDISFIELD
NEW MARLBOROUGH
MONTEREY
TYRINGHAM
GREAT BARRINGTON
SHEFFIELD
EGREMONT
ALFORD
MOUNT WASHINGTON

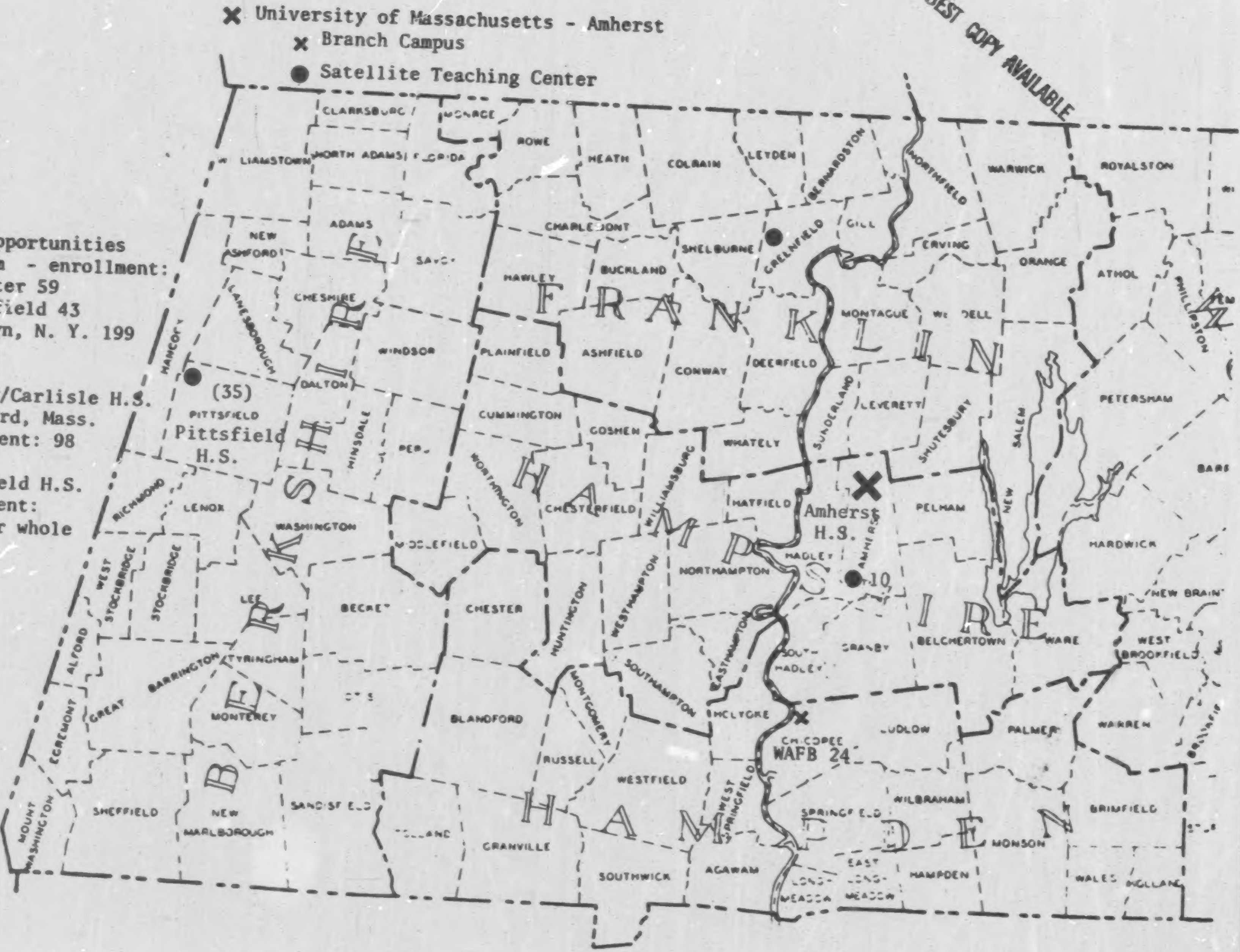
BEST COPY AVAILABLE


X North Adams State College
× Branch Campus
● Satellite Teaching Center
47
St. Luke's School of Nursing
Berkshire Country Day School
FRANKLIN
HAMPSHIRE
HAMPDEN
BERKSHIRE
W
CLARKSBURG
MONROE
FLORIDA
NORTH ADAMS
WILLIAMSTOWN
ADAMS
SAVOY
NEW ASHFORD
CHESHIRE
WINDSOR
LANESBOROUGH
DALTON
HINSDALE
PERU
HANCOCK
PITTSFIELD
RICHMOND
LENOX
STOCKBRIDGE
WEST STOCKBRIDGE
LEE
BECKET
OTIS
TYRINGHAM
MONTEREY
GREAT BARRINGTON
ALFORD
EGREMONT
MOUNT WASHINGTON
NEW MARLBOROUGH
SHEFFIELD
SANDISFIELD
WASHINGTON
ROWE
HEATH
COLRAIN
LEYDEN
BERNARDSTON
NORTHFIELD
WARWICK
ROYALSTON
PHILLIPSTON
ATHOL
ORANGE
PETERSHAM
BARRE
HARDWICK
NEW BRAINTREE
WEST BROOKFIELD
BROOKFIELD
WARREN
BRIMFIELD
WALES
HOLLAND
CHARLEMONT
SHELBURNE
GREENFIELD
GILL
ERVING
WENDELL
MONTAGUE
LEVERETT
SHUTESBURY
NEW SALEM
SALEM
PRESCOTT
WARE
HAWLEY
BUCKLAND
ASHFIELD
CONWAY
DEERFIELD
SUNDERLAND
WHATELY
PLAINFIELD
CUMMINGTON
GOSHEN
WILLIAMSBURG
HATFIELD
HADLEY
AMHERST
PELHAM
BELCHERTOWN
GRANBY
SOUTH HADLEY
PALMER
MONSON
WORTHINGTON
CHESTERFIELD
WESTHAMPTON
NORTHAMPTON
EASTHAMPTON
SOUTHAMPTON
HOLYOKE
CHICOPEE
LUDLOW
WILBRAHAM
HAMPDEN
SPRINGFIELD
EAST LONGMEADOW
LONGMEADOW
MIDDLEFIELD
CHESTER
HUNTINGTON
MONTGOMERY
RUSSELL
WESTFIELD
WEST SPRINGFIELD
AGAWAM
SOUTHWICK
GRANVILLE
BLANDFORD
TOLLAND

BEST COPY AVAILABLE


Greenfield C.C.
Satellite Teaching Center
15
Union Twist Drill
FRANKLIN
HAMPSHIRE
HAMPDEN
BERKSHIRE
CLARKSBURG
MONROE
ROWE
HEATH
COLRAIN
LEYDEN
BERNARDSTON
NORTHFIELD
WARWICK
ROYALSTON
WILLIAMSTOWN
NORTH ADAMS
FLORIDA
CHARLEMONT
GREENFIELD
GILL
ERVING
ORANGE
ATHOL
PHILLIPSTON
ADAMS
NEW ASHFORD
SAVOY
HAWLEY
BUCKLAND
SHELBURNE
MONTAGUE
WENDELL
CHESHIRE
LANESBOROUGH
WINDSOR
PLAINFIELD
ASHFIELD
CONWAY
DEERFIELD
LEVERETT
SHUTESBURY
SALEM
NEW
PETERSHAM
BARRE
HANCOCK
DALTON
PITTSFIELD
HINSDALE
PERU
CUMMINGTON
GOSHEN
WHATELY
SUNDERLAND
WORTHINGTON
CHESTERFIELD
WILLIAMSBURG
HATFIELD
PELHAM
HARDWICK
RICHMOND
LENOX
WASHINGTON
MIDDLEFIELD
HADLEY
AMHERST
NORTHAMPTON
NEW BRAINTREE
WEST STOCKBRIDGE
STOCKBRIDGE
LEE
BECKET
CHESTER
HUNTINGTON
WESTHAMPTON
EASTHAMPTON
SOUTH HADLEY
GRANBY
BELCHERTOWN
WARE
WEST BROOKFIELD
ALFORD
GREAT BARRINGTON
TYRINGHAM
OTIS
BLANDFORD
MONTGOMERY
SOUTHAMPTON
HOLYOKE
CHICOPEE
LUDLOW
PALMER
WARREN
BRIMFIELD
EGREMONT
MONTEREY
RUSSELL
WESTFIELD
WEST SPRINGFIELD
SPRINGFIELD
WILBRAHAM
MONSON
MOUNT WASHINGTON
SHEFFIELD
NEW MARLBOROUGH
SANDISFIELD
TOLLAND
GRANVILLE
SOUTHWICK
AGAWAM
LONGMEADOW
EAST LONGMEADOW
HAMPDEN
WALES
HOLLAND

BEST COPY AVAILABLE


✖ University of Massachusetts - Amherst
× Branch Campus
● Satellite Teaching Center
FRANKLIN
HAMPSHIRE
HAMPDEN
BERKSHIRE
Amherst H.S.
10
Pittsfield H.S.
(35)
CHICOPEE WAFB 24
CLARKSBURG
MONROE
ROWE
HEATH
COLRAIN
LEYDEN
BERNARDSTON
NORTHFIELD
WARWICK
ROYALSTON
WILLIAMSTOWN
NORTH ADAMS
FLORIDA
CHARLEMONT
GILL
ERVING
ORANGE
ATHOL
PHILLIPSTON
ADAMS
NEW ASHFORD
SAVOY
HAWLEY
BUCKLAND
SHELBURNE
GREENFIELD
MONTAGUE
WENDELL
PETERSHAM
CHESHIRE
LANESBOROUGH
HANCOCK
WINDSOR
PLAINFIELD
ASHFIELD
CONWAY
DEERFIELD
SUNDERLAND
LEVERETT
SHUTESBURY
SALEM
NEW
DALTON
PITTSFIELD
HINSDALE
PERU
CUMMINGTON
GOSHEN
WHATELY
BARRE
RICHMOND
LENOX
WASHINGTON
WORTHINGTON
CHESTERFIELD
WILLIAMSBURG
HATFIELD
PELHAM
HARDWICK
MIDDLEFIELD
HADLEY
AMHERST
NORTHAMPTON
WEST STOCKBRIDGE
STOCKBRIDGE
LEE
BECKET
CHESTER
HUNTINGTON
WESTHAMPTON
NEW BRAINTREE
ALFORD
GREAT BARRINGTON
TYRINGHAM
OTIS
MONTGOMERY
SOUTHAMPTON
EASTHAMPTON
SOUTH HADLEY
GRANBY
BELCHERTOWN
WARE
WEST BROOKFIELD
EGREMONT
MONTEREY
BLANDFORD
RUSSELL
HOLYOKE
LUDLOW
PALMER
WARREN
MOUNT WASHINGTON
SHEFFIELD
NEW MARLBOROUGH
SANDISFIELD
TOLLAND
GRANVILLE
WESTFIELD
WEST SPRINGFIELD
SPRINGFIELD
WILBRAHAM
MONSON
BRIMFIELD
SOUTHWICK
AGAWAM
LONGMEADOW
EAST LONGMEADOW
HAMPDEN
WALES
HOLLAND

Career Opportunities
Program - enrollment:
Worcester 59
Springfield 43
Brooklyn, N. Y. 199

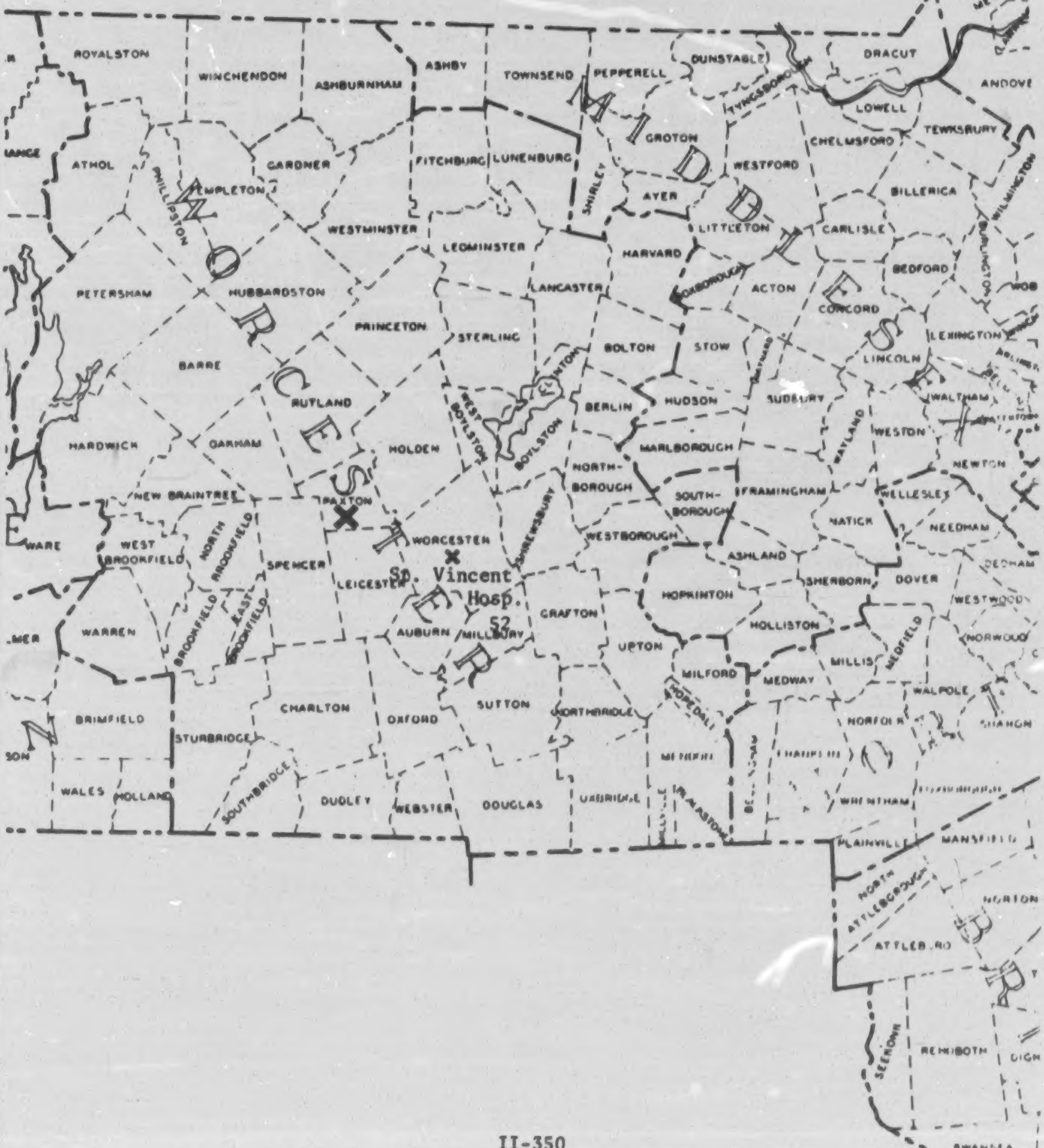
● Concord/Carlisle H.S.
Concord, Mass.
enrollment: 98

● Pittsfield H.S.
enrollment:
35 for whole
year

BEST COPY AVAILABLE

✖ Anna Maria College

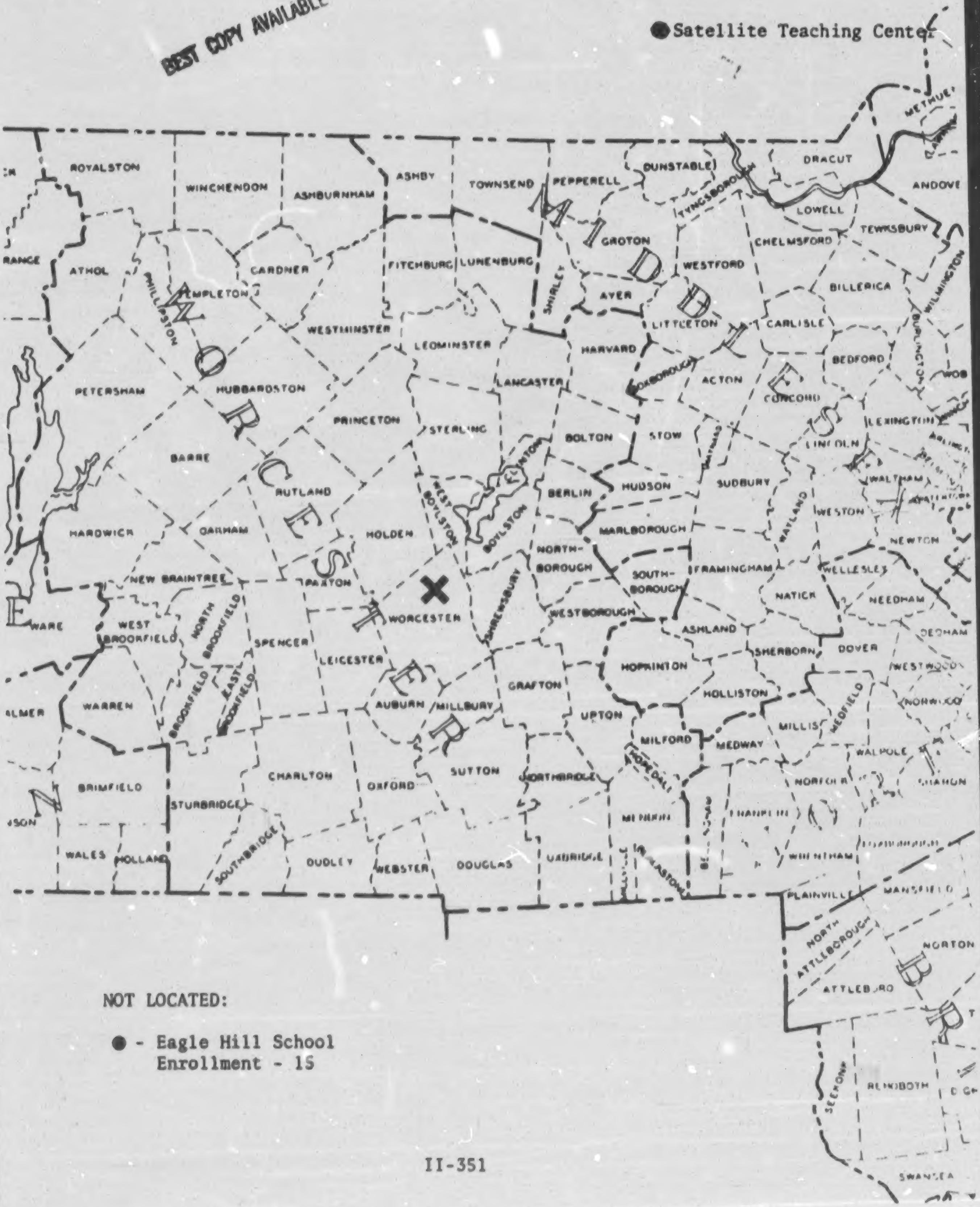
✖ Branch Campus


WORCESTER
MIDDLESEX
NORFOLK
ROYALSTON
WINCHENDON
ASHBURNHAM
ASHBY
TOWNSEND
PEPPERELL
DUNSTABLE
DRACUT
METHUEN
ANDOVER
TYNGSBOROUGH
LOWELL
TEWKSBURY
CHELMSFORD
ATHOL
GARDNER
FITCHBURG
LUNENBURG
GROTON
WESTFORD
SHIRLEY
AYER
BILLERICA
WILMINGTON
TEMPLETON
PHILLIPSTON
WESTMINSTER
LITTLETON
CARLISLE
LEOMINSTER
HARVARD
BEDFORD
BURLINGTON
PETERSHAM
HUBBARDSTON
LANCASTER
BOXBOROUGH
ACTON
CONCORD
PRINCETON
STERLING
BOLTON
STOW
LEXINGTON
LINCOLN
BARRE
CLINTON
MAYNARD
SUDBURY
WALTHAM
RUTLAND
WEST BOYLSTON
BERLIN
HUDSON
BOYLSTON
HARDWICK
OAKHAM
HOLDEN
MARLBOROUGH
WAYLAND
WESTON
NEWTON
NORTHBOROUGH
SOUTHBOROUGH
FRAMINGHAM
WELLESLEY
NEW BRAINTREE
PAXTON
NATICK
NEEDHAM
WARE
WEST BROOKFIELD
NORTH BROOKFIELD
SPENCER
WORCESTER
SHREWSBURY
WESTBOROUGH
ASHLAND
DEDHAM
LEICESTER
St. Vincent Hosp.
52
HOPKINTON
SHERBORN
DOVER
WESTWOOD
WARREN
BROOKFIELD
EAST BROOKFIELD
AUBURN
MILLBURY
GRAFTON
UPTON
HOLLISTON
NORWOOD
MILFORD
MEDWAY
MILLIS
MEDFIELD
WALPOLE
BRIMFIELD
CHARLTON
OXFORD
SUTTON
NORTHBRIDGE
HOPEDALE
NORFOLK
SHARON
STURBRIDGE
MENDON
BELLINGHAM
FRANKLIN
WALES
HOLLAND
SOUTHBRIDGE
DUDLEY
WEBSTER
DOUGLAS
UXBRIDGE
MILLVILLE
BLACKSTONE
WRENTHAM
FOXBOROUGH
PLAINVILLE
MANSFIELD
NORTH ATTLEBOROUGH
NORTON
ATTLEBORO
SEEKONK
REHOBOTH
SWANSEA

✖ Assumption College

● Satellite Teaching Center

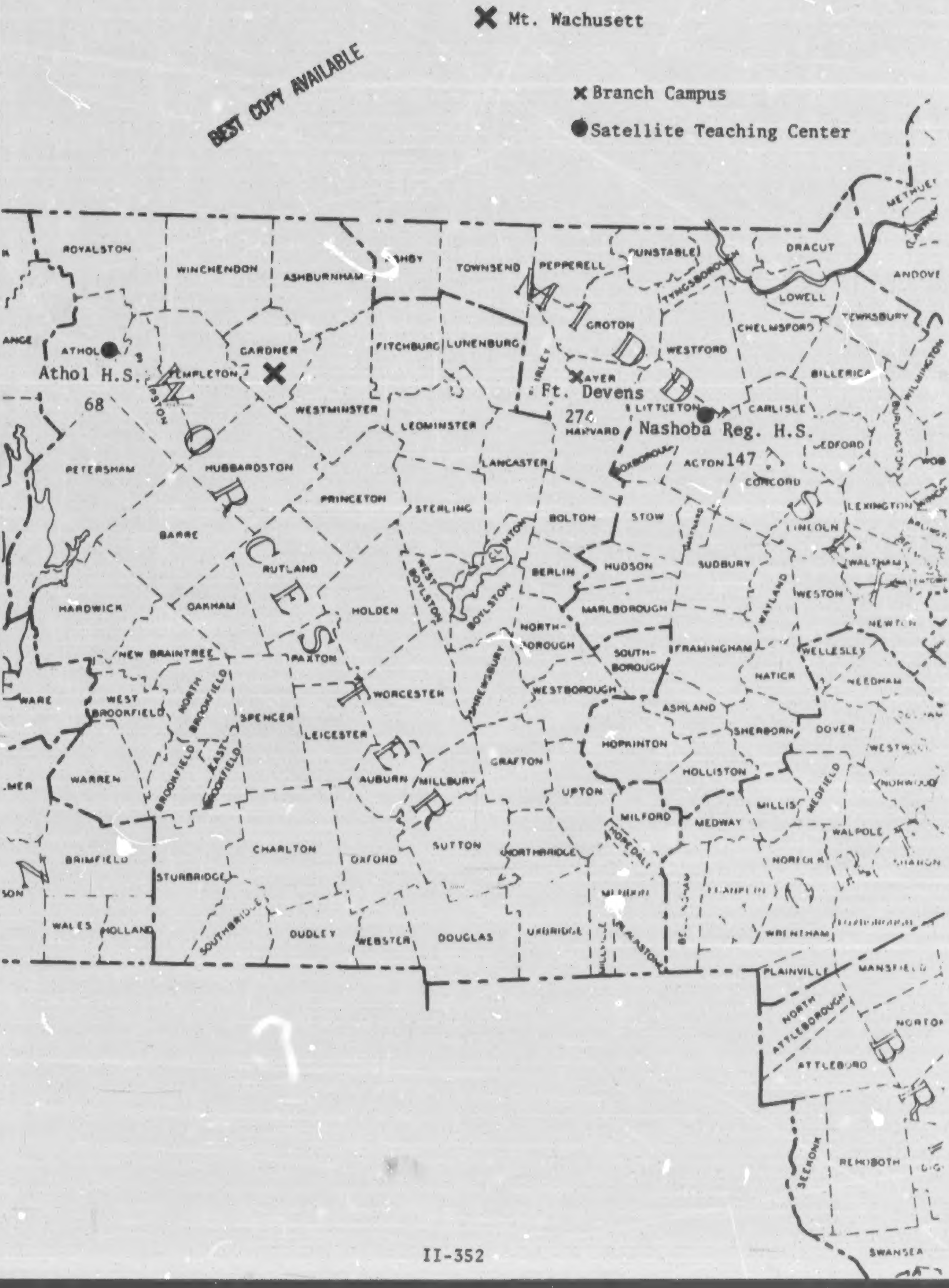
BEST COPY AVAILABLE


WORCESTER
MIDDLESEX
ROYALSTON
WINCHENDON
ASHBURNHAM
ASHBY
TOWNSEND
PEPPERELL
DUNSTABLE
TYNGSBOROUGH
DRACUT
METHUEN
ANDOVER
LOWELL
TEWKSBURY
CHELMSFORD
GROTON
WESTFORD
BILLERICA
WILMINGTON
ATHOL
TEMPLETON
GARDNER
FITCHBURG
LUNENBURG
SHIRLEY
AYER
LITTLETON
CARLISLE
BURLINGTON
BEDFORD
PHILLIPSTON
WESTMINSTER
LEOMINSTER
HARVARD
BOXBOROUGH
ACTON
CONCORD
PETERSHAM
HUBBARDSTON
LANCASTER
PRINCETON
STERLING
BOLTON
STOW
LEXINGTON
LINCOLN
BARRE
RUTLAND
CLINTON
BERLIN
HUDSON
SUDBURY
WALTHAM
WESTON
HARDWICK
OAKHAM
HOLDEN
WEST BOYLSTON
BOYLSTON
MARLBOROUGH
WAYLAND
NEWTON
NORTHBOROUGH
SOUTHBOROUGH
FRAMINGHAM
WELLESLEY
NEW BRAINTREE
PAXTON
WORCESTER
SHREWSBURY
WESTBOROUGH
NATICK
NEEDHAM
WARE
WEST BROOKFIELD
NORTH BROOKFIELD
SPENCER
LEICESTER
ASHLAND
SHERBORN
DOVER
DEDHAM
HOPKINTON
WESTWOOD
WARREN
BROOKFIELD
EAST BROOKFIELD
AUBURN
MILLBURY
GRAFTON
HOLLISTON
MEDFIELD
NORWOOD
UPTON
MILFORD
MEDWAY
MILLIS
WALPOLE
BRIMFIELD
STURBRIDGE
CHARLTON
OXFORD
SUTTON
NORTHBRIDGE
HOPEDALE
MENDON
FRANKLIN
NORFOLK
SHARON
WALES
HOLLAND
SOUTHBRIDGE
DUDLEY
WEBSTER
DOUGLAS
UXBRIDGE
BLACKSTONE
MILLVILLE
BELLINGHAM
WRENTHAM
FOXBOROUGH
PLAINVILLE
MANSFIELD
NORTH ATTLEBOROUGH
ATTLEBORO
NORTON
SEEKONK
REHOBOTH
SWANSEA
PALMER
ORANGE

NOT LOCATED:

● - Eagle Hill School
Enrollment - 15

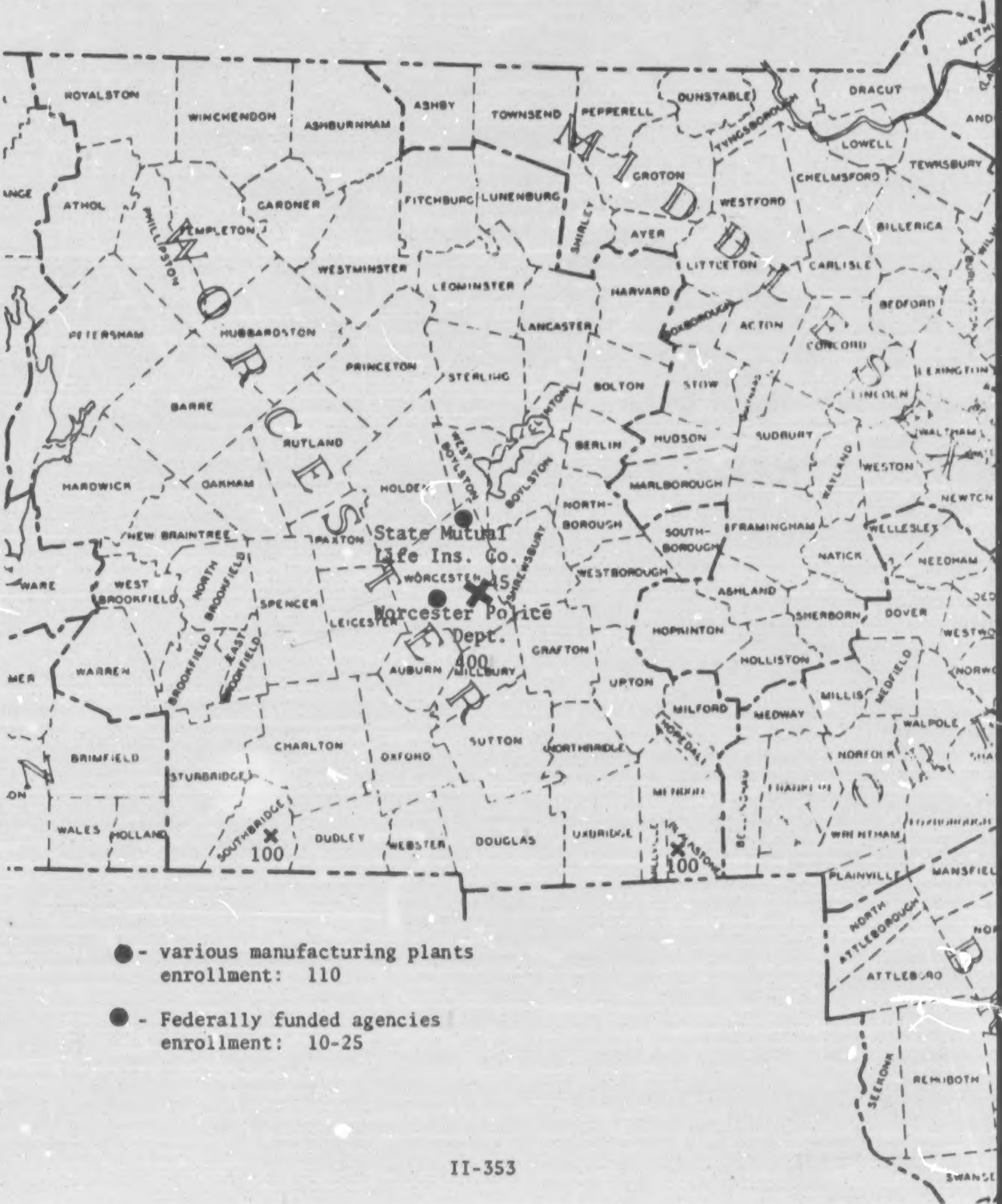
BEST COPY AVAILABLE


Mt. Wachusett
Branch Campus
Satellite Teaching Center
Athol H.S.
68
Ft. Devens
274
Nashoba Reg. H.S.
147
WORCESTER
MIDDLESEX
NORFOLK
BRISTOL
ROYALSTON
WINCHENDON
ASHBURNHAM
ASHBY
TOWNSEND
PEPPERELL
DUNSTABLE
DRACUT
METHUEN
ANDOVER
TYNGSBOROUGH
LOWELL
TEWKSBURY
CHELMSFORD
GROTON
WESTFORD
ATHOL
GARDNER
TEMPLETON
FITCHBURG
LUNENBURG
SHIRLEY
AYER
BILLERICA
WILMINGTON
WESTMINSTER
LEOMINSTER
LITTLETON
HARVARD
CARLISLE
BURLINGTON
BEDFORD
PETERSHAM
HUBBARDSTON
LANCASTER
BOXBOROUGH
ACTON
CONCORD
PRINCETON
STERLING
CLINTON
BOLTON
STOW
MAYNARD
LINCOLN
LEXINGTON
BARRE
RUTLAND
WEST BOYLSTON
BERLIN
HUDSON
SUDBURY
WALTHAM
HARDWICK
OAKHAM
HOLDEN
BOYLSTON
MARLBOROUGH
WAYLAND
WESTON
NEWTON
NORTHBOROUGH
SOUTHBOROUGH
FRAMINGHAM
WELLESLEY
NEW BRAINTREE
PAXTON
NATICK
NEEDHAM
WARE
WEST BROOKFIELD
NORTH BROOKFIELD
SPENCER
WORCESTER
SHREWSBURY
WESTBOROUGH
ASHLAND
LEICESTER
HOPKINTON
SHERBORN
DOVER
WESTWOOD
WARREN
BROOKFIELD
EAST BROOKFIELD
AUBURN
MILLBURY
GRAFTON
HOLLISTON
NORWOOD
UPTON
MILFORD
MEDWAY
MILLIS
MEDFIELD
WALPOLE
BRIMFIELD
STURBRIDGE
CHARLTON
OXFORD
SUTTON
NORTHBRIDGE
HOPEDALE
NORFOLK
SHARON
MENDON
BELLINGHAM
FRANKLIN
WALES
HOLLAND
SOUTHBRIDGE
DUDLEY
WEBSTER
DOUGLAS
UXBRIDGE
MILLVILLE
BLACKSTONE
WRENTHAM
FOXBOROUGH
PLAINVILLE
MANSFIELD
NORTH ATTLEBOROUGH
NORTON
ATTLEBORO
SEEKONK
REHOBOTH
SWANSEA

✖Quinsigamond C.C.

BEST COPY AVAILABLE

✖Branch Campus
●Satellite Teaching Center


ROYALSTON
WINCHENDON
ASHBURNHAM
ASHBY
TOWNSEND
PEPPERELL
DUNSTABLE
TYNGSBOROUGH
DRACUT
LOWELL
TEWKSBURY
CHELMSFORD
WESTFORD
GROTON
SHIRLEY
AYER
LITTLETON
CARLISLE
BILLERICA
BEDFORD
CONCORD
ACTON
BOXBOROUGH
HARVARD
LANCASTER
LEOMINSTER
FITCHBURG
LUNENBURG
GARDNER
TEMPLETON
PHILLIPSTON
ATHOL
WESTMINSTER
PETERSHAM
HUBBARDSTON
PRINCETON
STERLING
BOLTON
STOW
LINCOLN
LEXINGTON
BARRE
RUTLAND
WEST BOYLSTON
CLINTON
BERLIN
HUDSON
SUDBURY
WAYLAND
WESTON
WALTHAM
HARDWICK
OAKHAM
HOLDEN
BOYLSTON
NORTHBOROUGH
MARLBOROUGH
SOUTHBOROUGH
FRAMINGHAM
WELLESLEY
NEWTON
NATICK
NEEDHAM
NEW BRAINTREE
PAXTON
WORCESTER
SHREWSBURY
WESTBOROUGH
ASHLAND
SHERBORN
DOVER
WARE
WEST BROOKFIELD
NORTH BROOKFIELD
SPENCER
LEICESTER
HOPKINTON
HOLLISTON
GRAFTON
WARREN
BROOKFIELD
EAST BROOKFIELD
AUBURN
MILLBURY
UPTON
MILFORD
MEDWAY
MILLIS
MEDFIELD
WALPOLE
BRIMFIELD
STURBRIDGE
CHARLTON
OXFORD
SUTTON
NORTHBRIDGE
HOPEDALE
MENDON
BELLINGHAM
FRANKLIN
NORFOLK
WRENTHAM
WALES
HOLLAND
SOUTHBRIDGE
DUDLEY
WEBSTER
DOUGLAS
UXBRIDGE
MILLVILLE
BLACKSTONE
PLAINVILLE
MANSFIELD
NORTH ATTLEBOROUGH
ATTLEBORO
SEEKONK
REHOBOTH
SWANSEA
WORCESTER
MIDDLESEX
NORFOLK

State Mutual Life Ins. Co.
15

Worcester Police Dept.
400

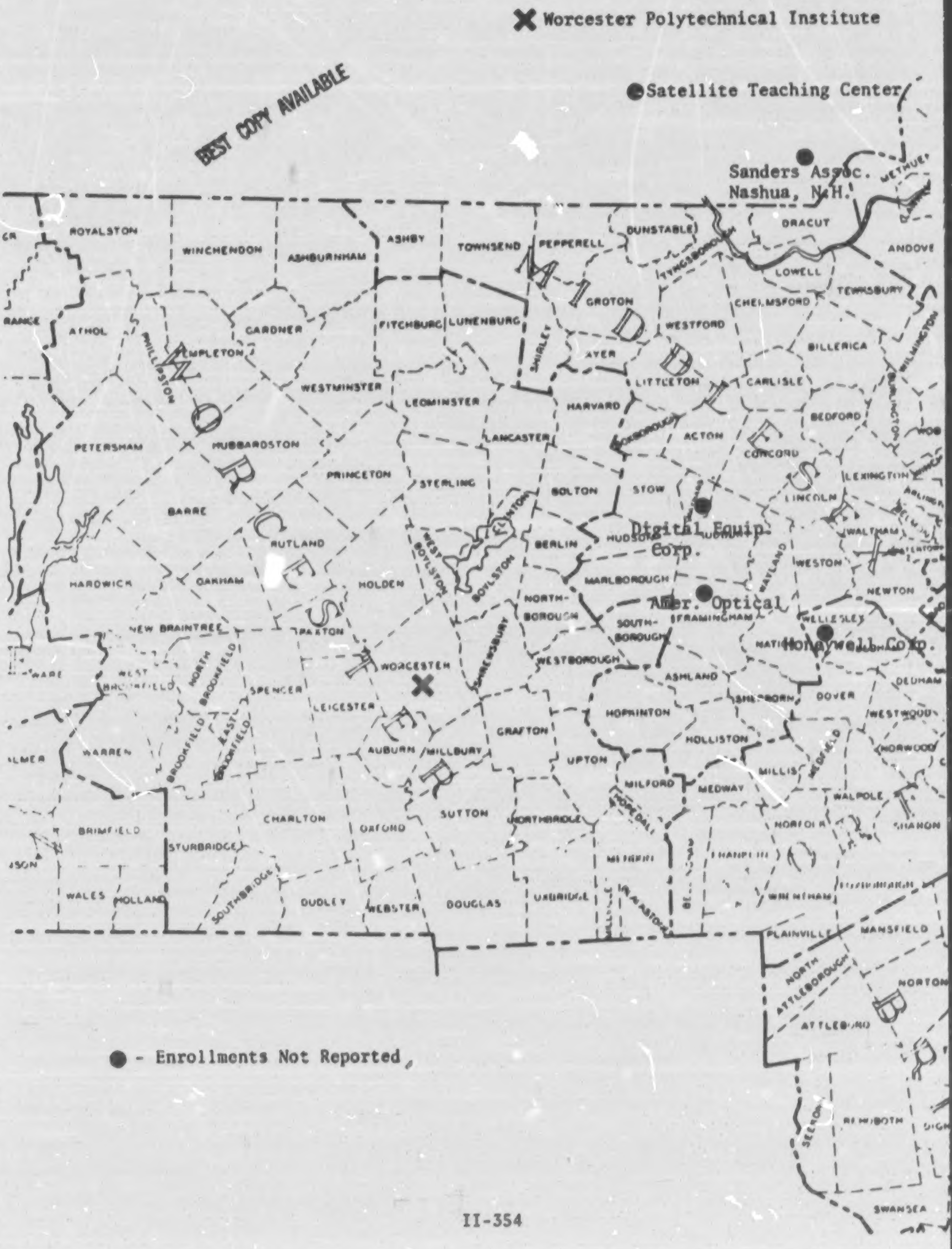
100

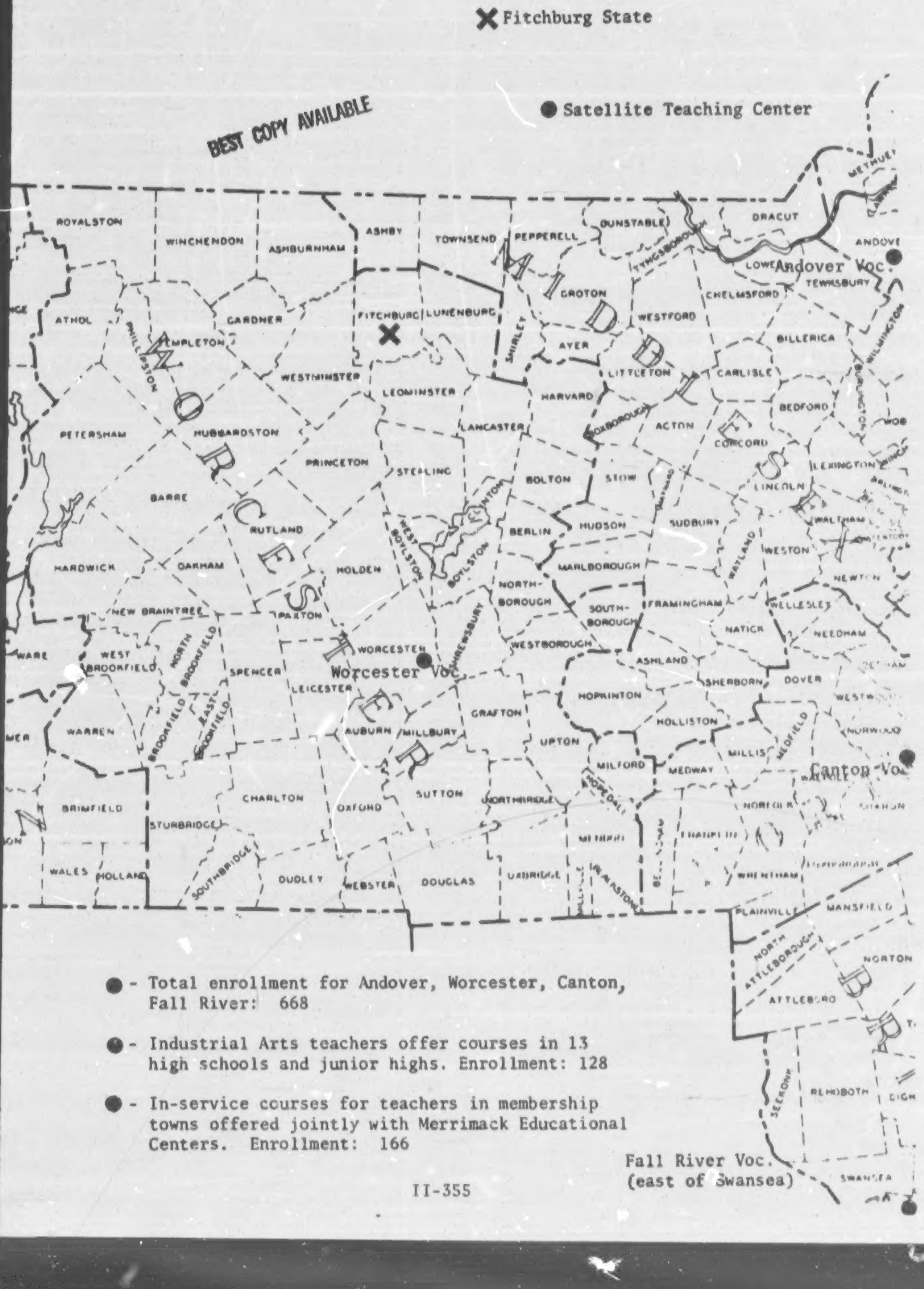
100

● - various manufacturing plants
enrollment: 110

● - Federally funded agencies
enrollment: 10-25

BEST COPY AVAILABLE


✖ Worcester Polytechnical Institute
● Satellite Teaching Center
Sanders Assoc. Nashua, N.H.
Digital Equip. Corp.
Amer. Optical
Honeywell Corp.
WORCESTER
MIDDLESEX
NORFOLK
ROYALSTON
WINCHENDON
ASHBURNHAM
ASHBY
TOWNSEND
PEPPERELL
DUNSTABLE
TYNGSBOROUGH
DRACUT
LOWELL
ANDOVER
TEWKSBURY
CHELMSFORD
METHUEN
ATHOL
PHILLIPSTON
TEMPLETON
GARDNER
FITCHBURG
LUNENBURG
SHIRLEY
GROTON
WESTFORD
BILLERICA
WILMINGTON
AYER
LITTLETON
CARLISLE
BEDFORD
WESTMINSTER
LEOMINSTER
HARVARD
BOXBOROUGH
ACTON
CONCORD
LEXINGTON
PETERSHAM
HUBBARDSTON
LANCASTER
PRINCETON
STERLING
BOLTON
STOW
LINCOLN
BARRE
CLINTON
HUDSON
SUDBURY
WALTHAM
RUTLAND
BERLIN
WEST BOYLSTON
BOYLSTON
HARDWICK
OAKHAM
HOLDEN
MARLBOROUGH
WAYLAND
WESTON
NEWTON
NORTHBOROUGH
SOUTHBOROUGH
FRAMINGHAM
WELLESLEY
NEW BRAINTREE
PAXTON
SHREWSBURY
NATICK
WARE
WEST BROOKFIELD
NORTH BROOKFIELD
SPENCER
LEICESTER
WORCESTER
WESTBOROUGH
ASHLAND
SHERBORN
DOVER
DEDHAM
HOPKINTON
WESTWOOD
BROOKFIELD
EAST BROOKFIELD
GRAFTON
HOLLISTON
MEDFIELD
NORWOOD
WARREN
AUBURN
MILLBURY
UPTON
MILLIS
MILFORD
MEDWAY
WALPOLE
BRIMFIELD
STURBRIDGE
CHARLTON
OXFORD
SUTTON
NORTHBRIDGE
HOPEDALE
NORFOLK
SHARON
MENDON
FRANKLIN
WALES
HOLLAND
SOUTHBRIDGE
DUDLEY
WEBSTER
DOUGLAS
UXBRIDGE
MILLVILLE
BLACKSTONE
BELLINGHAM
WRENTHAM
FOXBOROUGH
PLAINVILLE
MANSFIELD
NORTH ATTLEBOROUGH
NORTON
ATTLEBORO
SEEKONK
REHOBOTH
SWANSEA
● - Enrollments Not Reported


MIDDLESEX
WORCESTER
ROYALSTON
WINCHENDON
ASHBURNHAM
ASHBY
TOWNSEND
PEPPERELL
DUNSTABLE
TYNGSBOROUGH
DRACUT
METHUEN
ANDOVER
LOWELL
TEWKSBURY
CHELMSFORD
ATHOL
TEMPLETON
PHILLIPSTON
GARDNER
FITCHBURG
LUNENBURG
SHIRLEY
GROTON
WESTFORD
AYER
BILLERICA
WILMINGTON
WESTMINSTER
LEOMINSTER
LITTLETON
CARLISLE
HARVARD
BOXBOROUGH
BEDFORD
BURLINGTON
ACTON
CONCORD
PETERSHAM
HUBBARDSTON
LANCASTER
PRINCETON
STERLING
BOLTON
STOW
LEXINGTON
LINCOLN
BARRE
CLINTON
BERLIN
HUDSON
SUDBURY
MAYNARD
WALTHAM
RUTLAND
WEST BOYLSTON
BOYLSTON
WAYLAND
WESTON
HARDWICK
OAKHAM
HOLDEN
MARLBOROUGH
NEWTON
NORTHBOROUGH
NEW BRAINTREE
PAXTON
SOUTHBOROUGH
FRAMINGHAM
WELLESLEY
SHREWSBURY
NATICK
NEEDHAM
WARE
WEST BROOKFIELD
NORTH BROOKFIELD
SPENCER
WORCESTER
WESTBOROUGH
ASHLAND
DOVER
LEICESTER
SHERBORN
WESTWOOD
HOPKINTON
WARREN
BROOKFIELD
EAST BROOKFIELD
AUBURN
MILLBURY
GRAFTON
HOLLISTON
NORWOOD
UPTON
MILLIS
MEDFIELD
MILFORD
MEDWAY
WALPOLE
HOPEDALE
BRIMFIELD
CHARLTON
OXFORD
SUTTON
NORTHBRIDGE
NORFOLK
SHARON
STURBRIDGE
MENDON
FRANKLIN
BELLINGHAM
FOXBOROUGH
WALES
HOLLAND
SOUTHBRIDGE
DUDLEY
WEBSTER
DOUGLAS
UXBRIDGE
MILLVILLE
BLACKSTONE
WRENTHAM
PLAINVILLE
MANSFIELD
NORTH ATTLEBOROUGH
NORTON
ATTLEBORO
SEEKONK
REHOBOTH
DIGHTON
SWANSEA
Andover Voc.
Worcester Voc.
Canton Voc.

✕ Fitchburg State

● Satellite Teaching Center

BEST COPY AVAILABLE

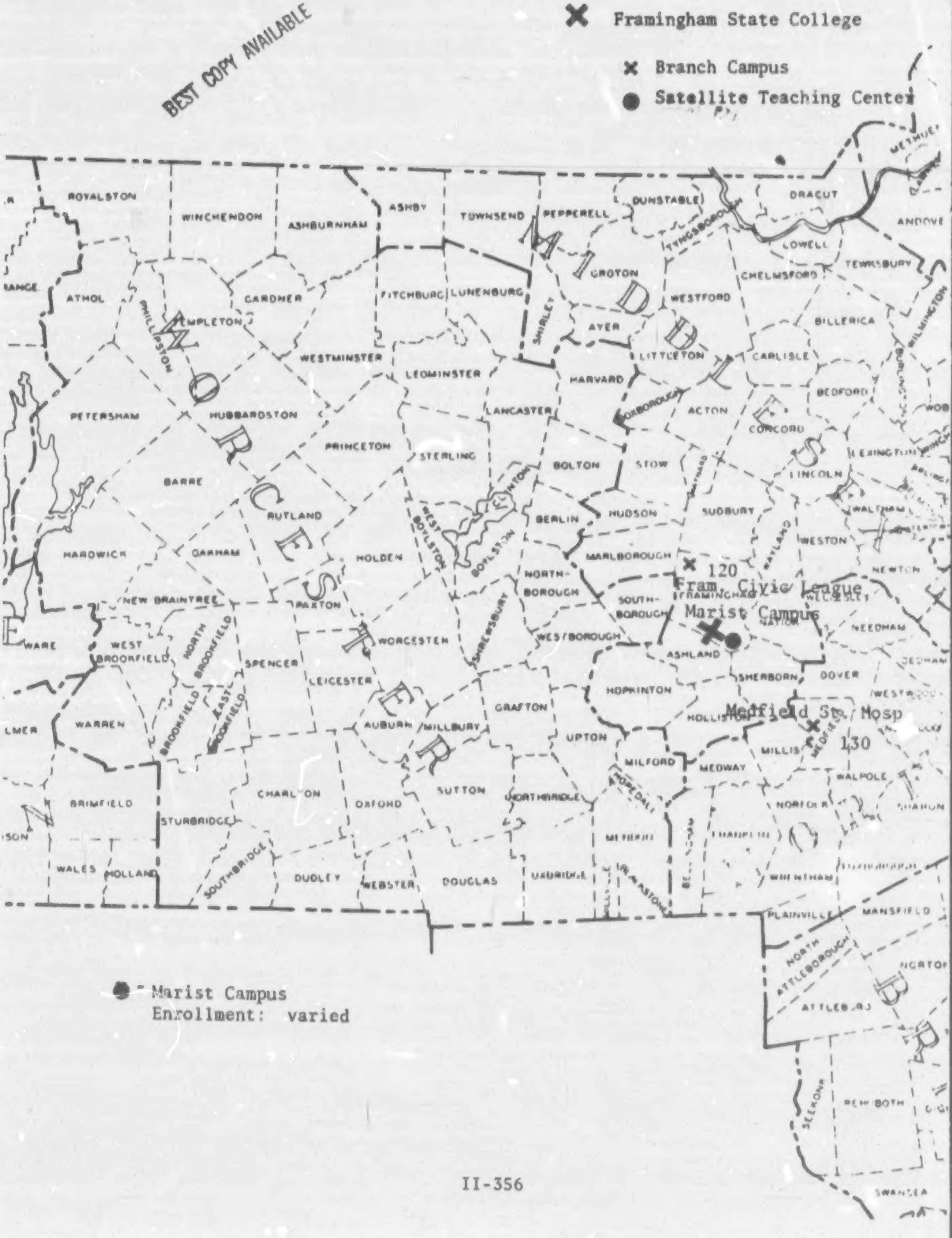
Fall River Voc.
(east of Swansea)

● - Total enrollment for Andover, Worcester, Canton, Fall River: 668

● - Industrial Arts teachers offer courses in 13 high schools and junior highs. Enrollment: 128

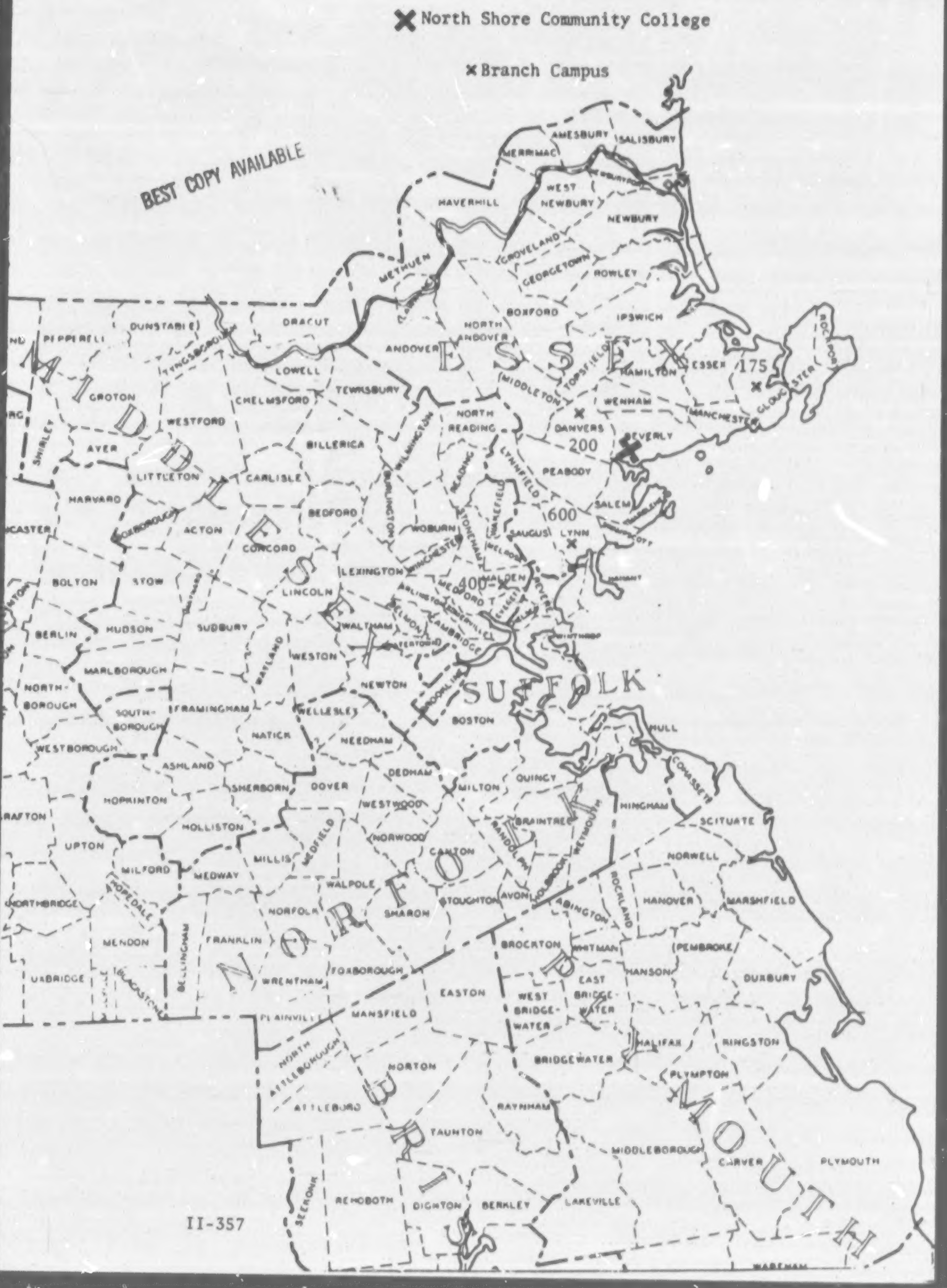
● - In-service courses for teachers in membership towns offered jointly with Merrimack Educational Centers. Enrollment: 166

BEST COPY AVAILABLE

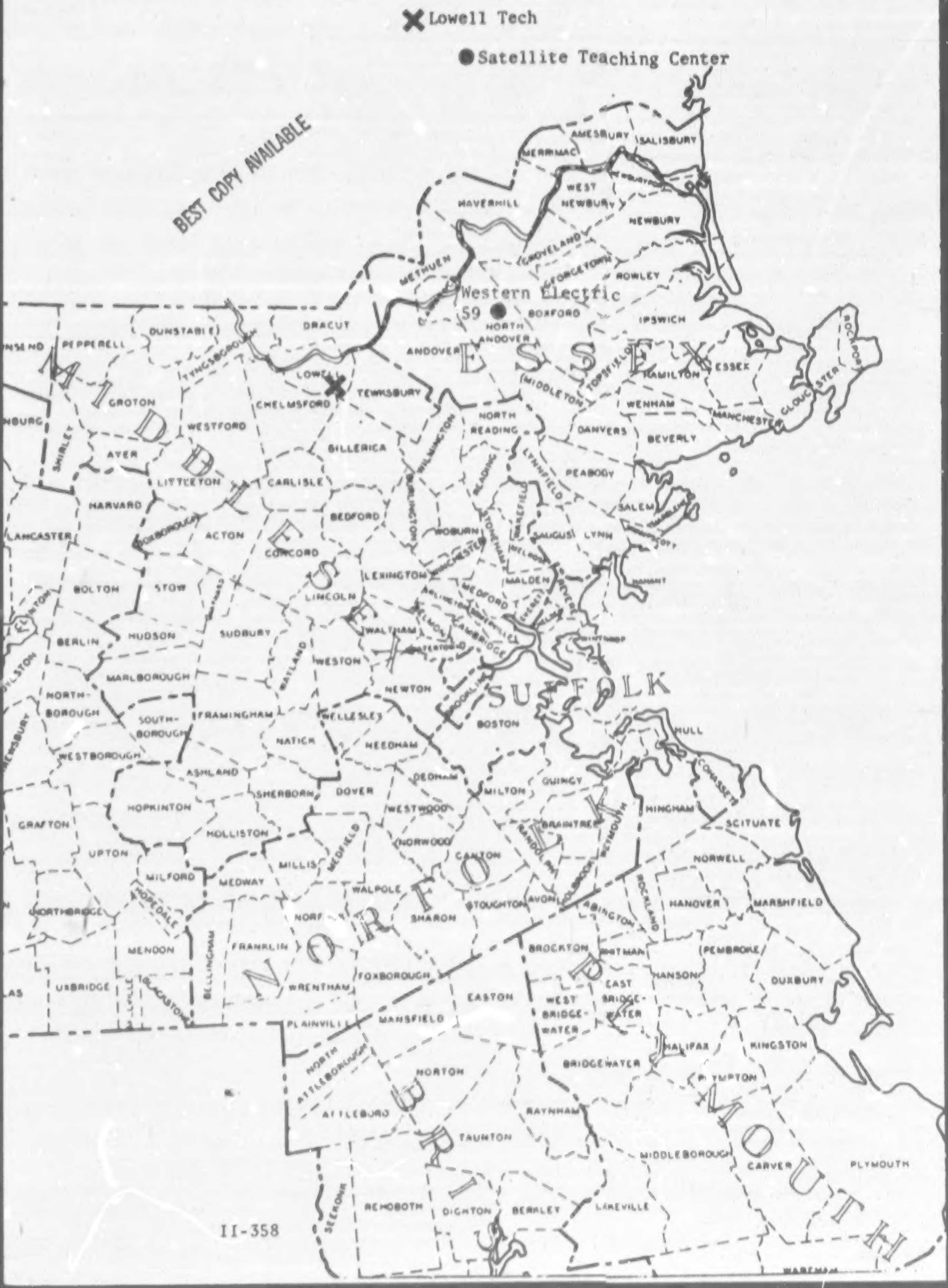

✖ Framingham State College
× Branch Campus
● Satellite Teaching Center
× 120
Fram. Civic League
Marist Campus
Medfield St. Hosp
130
WORCESTER
MIDDLESEX
ROYALSTON
WINCHENDON
ASHBURNHAM
ASHBY
TOWNSEND
PEPPERELL
DUNSTABLE
TYNGSBOROUGH
DRACUT
LOWELL
ANDOVER
TEWKSBURY
CHELMSFORD
GROTON
WESTFORD
ATHOL
GARDNER
TEMPLETON
PHILLIPSTON
FITCHBURG
LUNENBURG
SHIRLEY
AYER
BILLERICA
WESTMINSTER
LEOMINSTER
HARVARD
LITTLETON
CARLISLE
BEDFORD
PETERSHAM
HUBBARDSTON
LANCASTER
BOXBOROUGH
ACTON
CONCORD
PRINCETON
STERLING
BOLTON
STOW
LINCOLN
LEXINGTON
BARRE
RUTLAND
CLINTON
BERLIN
HUDSON
SUDBURY
WALTHAM
HARDWICK
OAKHAM
HOLDEN
WEST BOYLSTON
BOYLSTON
MARLBOROUGH
WAYLAND
WESTON
NEWTON
NEW BRAINTREE
PAXTON
NORTHBOROUGH
SOUTHBOROUGH
FRAMINGHAM
NATICK
WELLESLEY
NEEDHAM
WARE
WEST BROOKFIELD
NORTH BROOKFIELD
SPENCER
WORCESTER
SHREWSBURY
WESTBOROUGH
ASHLAND
SHERBORN
DOVER
BROOKFIELD
EAST BROOKFIELD
LEICESTER
HOPKINTON
GRAFTON
HOLLISTON
MEDFIELD
WARREN
AUBURN
MILLBURY
UPTON
MILFORD
MEDWAY
MILLIS
WALPOLE
BRIMFIELD
CHARLTON
OXFORD
SUTTON
NORTHBRIDGE
HOPEDALE
NORFOLK
SHARON
STURBRIDGE
MENDON
FRANKLIN
WALES
HOLLAND
SOUTHBRIDGE
DUDLEY
WEBSTER
DOUGLAS
UXBRIDGE
BLACKSTONE
BELLINGHAM
WRENTHAM
PLAINVILLE
MANSFIELD
NORTH ATTLEBOROUGH
NORTON
ATTLEBORO
SEEKONK
REHOBOTH
SWANSEA

● Marist Campus
Enrollment: varied

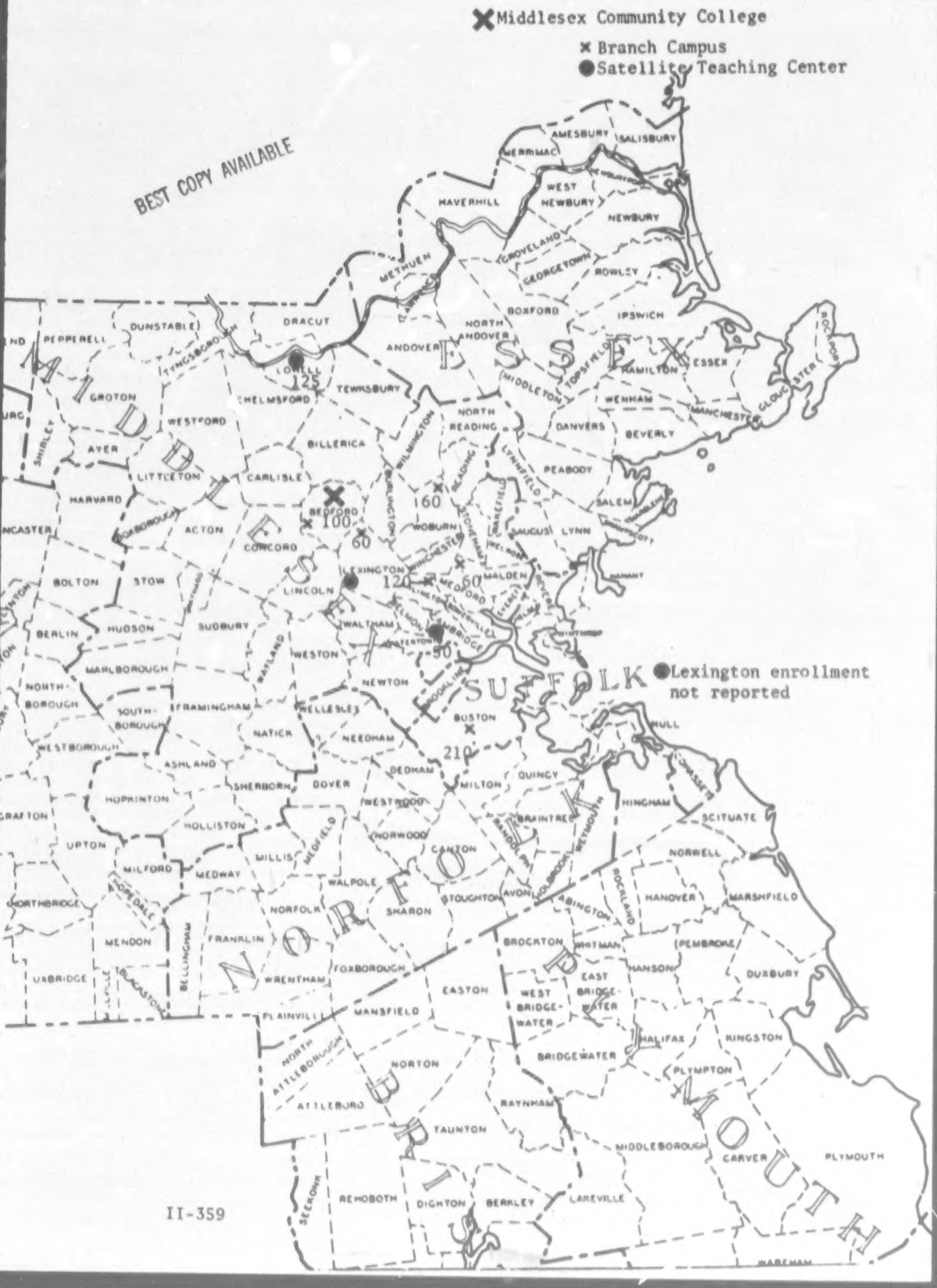
BEST COPY AVAILABLE


✖ North Shore Community College
× Branch Campus
ESSEX
MIDDLESEX
SUFFOLK
NORFOLK
BRISTOL
PLYMOUTH
175
200
600
400
AMESBURY
SALISBURY
MERRIMAC
WEST NEWBURY
NEWBURY
HAVERHILL
GROVELAND
GEORGETOWN
ROWLEY
METHUEN
BOXFORD
IPSWICH
ROCKPORT
NORTH ANDOVER
ANDOVER
TOPSFIELD
ESSEX
HAMILTON
MIDDLETON
WENHAM
GLOUCESTER
MANCHESTER
DANVERS
BEVERLY
PEABODY
SALEM
LYNNFIELD
SAUGUS
LYNN
NAHANT
DUNSTABLE
PEPPERELL
TYNGSBOROUGH
DRACUT
LOWELL
TEWKSBURY
CHELMSFORD
GROTON
WESTFORD
SHIRLEY
AYER
BILLERICA
WILMINGTON
NORTH READING
READING
LITTLETON
CARLISLE
HARVARD
BOXBOROUGH
ACTON
BEDFORD
BURLINGTON
WOBURN
STONEHAM
WAKEFIELD
CONCORD
LEXINGTON
WINCHESTER
MELROSE
MALDEN
MEDFORD
BOLTON
STOW
MAYNARD
LINCOLN
ARLINGTON
SOMERVILLE
EVERETT
REVERE
CHELSEA
WINTHROP
BERLIN
HUDSON
SUDBURY
WALTHAM
BELMONT
CAMBRIDGE
WATERTOWN
WESTON
WAYLAND
MARLBOROUGH
NEWTON
BROOKLINE
NORTHBOROUGH
SOUTHBOROUGH
FRAMINGHAM
WELLESLEY
BOSTON
NATICK
NEEDHAM
HULL
WESTBOROUGH
ASHLAND
DEDHAM
QUINCY
COHASSET
HOPKINTON
SHERBORN
DOVER
MILTON
WESTWOOD
BRAINTREE
WEYMOUTH
HINGHAM
SCITUATE
HOLLISTON
NORWOOD
RANDOLPH
UPTON
CANTON
NORWELL
MILFORD
MEDWAY
MILLIS
MEDFIELD
WALPOLE
HOLBROOK
ROCKLAND
NORTHBRIDGE
HOPEDALE
NORFOLK
SHARON
STOUGHTON
AVON
ABINGTON
HANOVER
MARSHFIELD
MENDON
BELLINGHAM
FRANKLIN
BROCKTON
WHITMAN
PEMBROKE
UXBRIDGE
BLACKSTONE
WRENTHAM
FOXBOROUGH
EASTON
WEST BRIDGEWATER
EAST BRIDGEWATER
HANSON
DUXBURY
PLAINVILLE
MANSFIELD
HALIFAX
KINGSTON
NORTH ATTLEBOROUGH
NORTON
BRIDGEWATER
PLYMPTON
ATTLEBORO
RAYNHAM
TAUNTON
MIDDLEBOROUGH
CARVER
PLYMOUTH
SEEKONK
REHOBOTH
DIGHTON
BERKLEY
LAKEVILLE
WAREHAM

BEST COPY AVAILABLE

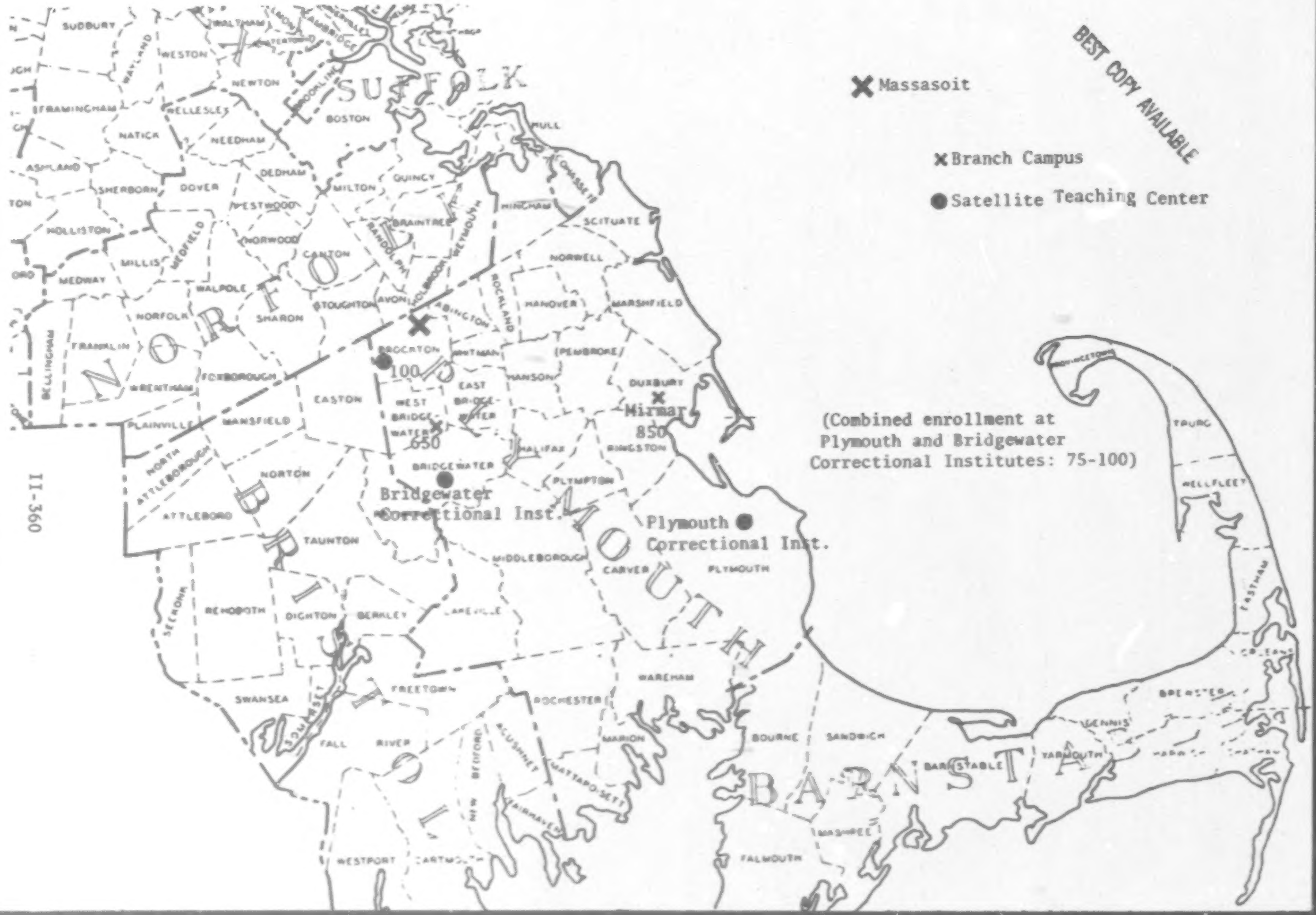

✖ Lowell Tech
● Satellite Teaching Center
Western Electric
59
ESSEX
MIDDLESEX
SUFFOLK
NORFOLK
BRISTOL
PLYMOUTH
AMESBURY
SALISBURY
MERRIMAC
HAVERHILL
WEST NEWBURY
NEWBURY
GROVELAND
GEORGETOWN
ROWLEY
METHUEN
BOXFORD
IPSWICH
DRACUT
NORTH ANDOVER
ANDOVER
DUNSTABLE
PEPPERELL
TYNGSBOROUGH
LOWELL
TEWKSBURY
CHELMSFORD
MIDDLETON
TOPSFIELD
HAMILTON
ESSEX
ROCKPORT
GLOUCESTER
MANCHESTER
WENHAM
BEVERLY
DANVERS
NORTH READING
WILMINGTON
BILLERICA
WESTFORD
GROTON
SHIRLEY
AYER
LITTLETON
CARLISLE
BURLINGTON
READING
LYNNFIELD
PEABODY
SALEM
MARBLEHEAD
SWAMPSCOTT
NAHANT
LYNN
SAUGUS
WAKEFIELD
STONEHAM
MELROSE
MALDEN
WOBURN
WINCHESTER
MEDFORD
EVERETT
REVERE
CHELSEA
WINTHROP
BEDFORD
CONCORD
ACTON
BOXBOROUGH
HARVARD
LANCASTER
BOLTON
STOW
MAYNARD
LINCOLN
LEXINGTON
ARLINGTON
SOMERVILLE
BELMONT
CAMBRIDGE
WATERTOWN
WALTHAM
WESTON
SUDBURY
HUDSON
BERLIN
CLINTON
MARLBOROUGH
NORTHBOROUGH
SOUTHBOROUGH
WESTBOROUGH
FRAMINGHAM
WAYLAND
NATICK
WELLESLEY
NEWTON
BROOKLINE
BOSTON
NEEDHAM
DEDHAM
MILTON
QUINCY
HULL
COHASSET
HINGHAM
SCITUATE
WEYMOUTH
BRAINTREE
RANDOLPH
HOLBROOK
ASHLAND
HOPKINTON
SHERBORN
DOVER
WESTWOOD
NORWOOD
CANTON
HOLLISTON
MILLIS
MEDFIELD
MEDWAY
WALPOLE
UPTON
GRAFTON
MILFORD
HOPEDALE
NORTHBRIDGE
MENDON
BELLINGHAM
FRANKLIN
NORFOLK
SHARON
STOUGHTON
AVON
ABINGTON
ROCKLAND
NORWELL
HANOVER
MARSHFIELD
PEMBROKE
DUXBURY
HANSON
WHITMAN
BROCKTON
EAST BRIDGEWATER
WEST BRIDGEWATER
EASTON
FOXBOROUGH
WRENTHAM
UXBRIDGE
MILLVILLE
BLACKSTONE
PLAINVILLE
MANSFIELD
NORTH ATTLEBOROUGH
ATTLEBORO
NORTON
BRIDGEWATER
HALIFAX
KINGSTON
PLYMPTON
RAYNHAM
TAUNTON
MIDDLEBOROUGH
CARVER
PLYMOUTH
SEEKONK
REHOBOTH
DIGHTON
BERKLEY
LAKEVILLE
WAREHAM

BEST COPY AVAILABLE

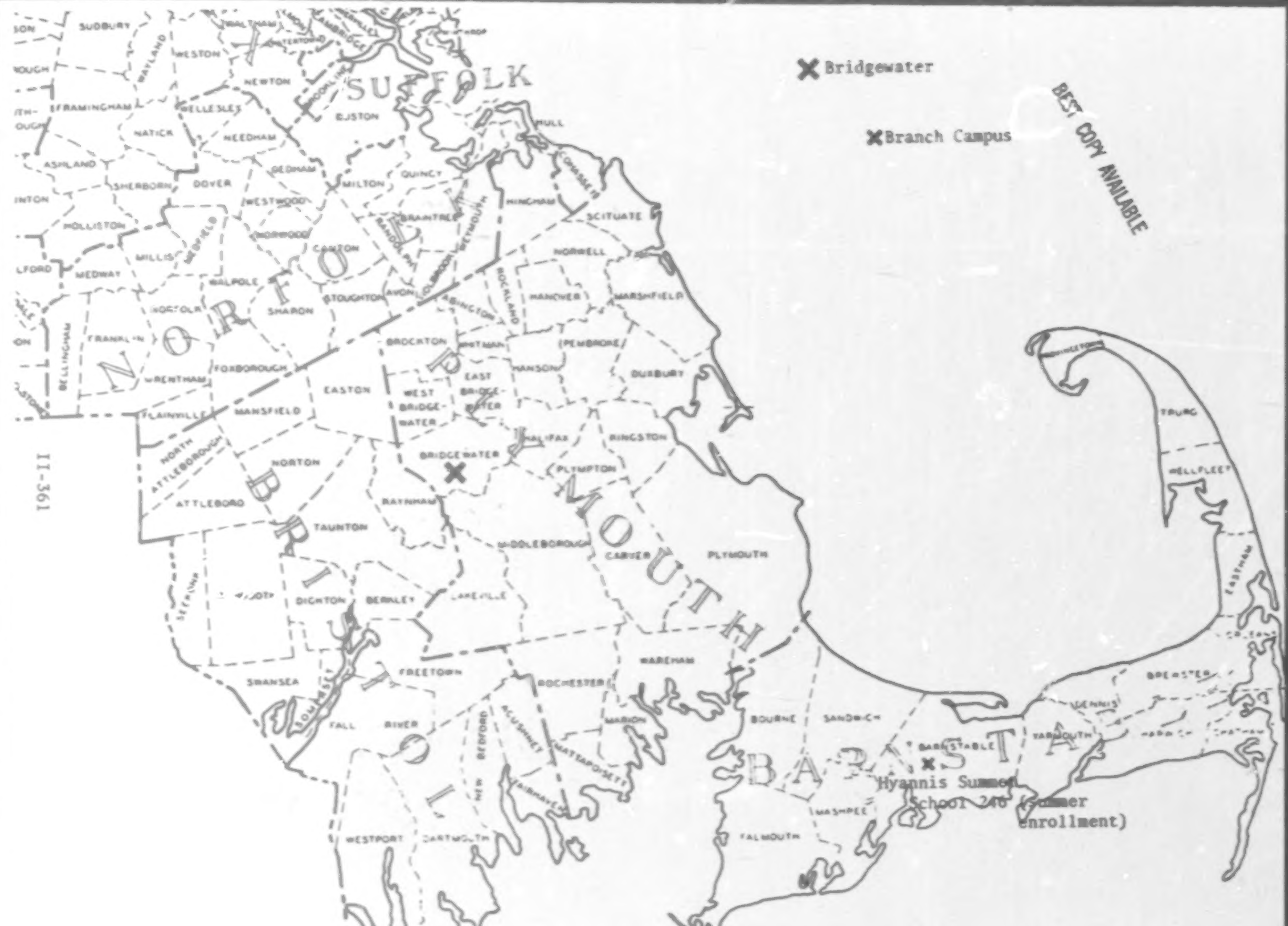

✖ Middlesex Community College
× Branch Campus
● Satellite Teaching Center
MIDDLESEX
ESSEX
SUFFOLK
NORFOLK
PLYMOUTH
BRISTOL
LOWELL
125
BEDFORD
100
60
60
LEXINGTON
120
60
50
BOSTON
210
AMESBURY
SALISBURY
MERRIMAC
HAVERHILL
WEST NEWBURY
NEWBURY
METHUEN
GROVELAND
GEORGETOWN
ROWLEY
LAWRENCE
BOXFORD
IPSWICH
DRACUT
NORTH ANDOVER
ANDOVER
TOPSFIELD
HAMILTON
ESSEX
ROCKPORT
GLOUCESTER
DUNSTABLE
PEPPERELL
TYNGSBOROUGH
TEWKSBURY
MIDDLETON
WENHAM
MANCHESTER
GROTON
CHELMSFORD
NORTH READING
DANVERS
BEVERLY
WESTFORD
SHIRLEY
AYER
BILLERICA
WILMINGTON
LYNNFIELD
PEABODY
LITTLETON
CARLISLE
BURLINGTON
READING
SALEM
MARBLEHEAD
HARVARD
BOXBOROUGH
ACTON
WOBURN
STONEHAM
WAKEFIELD
SAUGUS
LYNN
SWAMPSCOTT
LANCASTER
CONCORD
WINCHESTER
MELROSE
NAHANT
BOLTON
STOW
LINCOLN
MEDFORD
MALDEN
REVERE
MAYNARD
ARLINGTON
SOMERVILLE
EVERETT
CHELSEA
WINTHROP
BERLIN
HUDSON
SUDBURY
WALTHAM
BELMONT
CAMBRIDGE
WATERTOWN
WAYLAND
WESTON
MARLBOROUGH
NEWTON
BROOKLINE
NORTHBOROUGH
SOUTHBOROUGH
FRAMINGHAM
WELLESLEY
NATICK
NEEDHAM
HULL
WESTBOROUGH
ASHLAND
DEDHAM
MILTON
QUINCY
HOPKINTON
SHERBORN
DOVER
WESTWOOD
BRAINTREE
WEYMOUTH
HINGHAM
COHASSET
SCITUATE
GRAFTON
HOLLISTON
NORWOOD
RANDOLPH
UPTON
MILLIS
MEDFIELD
CANTON
HOLBROOK
ROCKLAND
NORWELL
MILFORD
MEDWAY
WALPOLE
AVON
ABINGTON
HANOVER
MARSHFIELD
NORTHBRIDGE
HOPEDALE
NORFOLK
SHARON
STOUGHTON
MENDON
BELLINGHAM
FRANKLIN
BROCKTON
WHITMAN
PEMBROKE
FOXBOROUGH
HANSON
DUXBURY
UXBRIDGE
BLACKSTONE
WRENTHAM
EASTON
WEST BRIDGE-WATER
EAST BRIDGE-WATER
PLAINVILLE
MANSFIELD
HALIFAX
KINGSTON
NORTH ATTLEBOROUGH
NORTON
BRIDGEWATER
PLYMPTON
ATTLEBORO
RAYNHAM
TAUNTON
MIDDLEBOROUGH
CARVER
PLYMOUTH
SEEKONK
REHOBOTH
DIGHTON
BERKLEY
LAKEVILLE
WAREHAM

● Lexington enrollment not reported

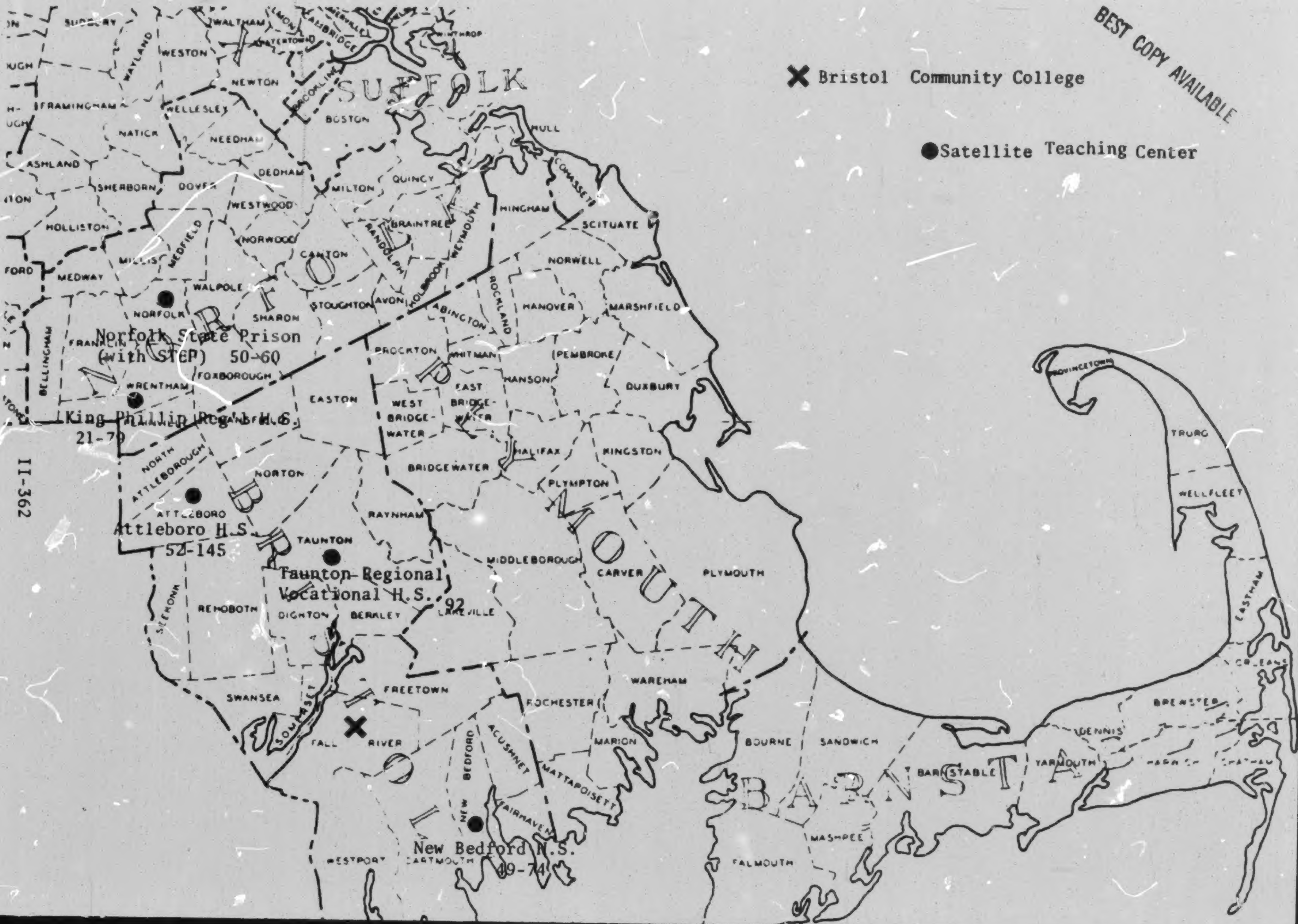
BEST COPY AVAILABLE


Massasoit
Branch Campus
Satellite Teaching Center
(Combined enrollment at Plymouth and Bridgewater Correctional Institutes: 75-100)
Brockton
100
West Bridgewater
650
Duxbury
Mirmar
850
Bridgewater
Bridgewater Correctional Inst.
Plymouth Correctional Inst.
SUFFOLK
NORFOLK
PLYMOUTH
BRISTOL
BARNSTABLE
Sudbury
Wayland
Weston
Waltham
Watertown
Cambridge
Newton
Brookline
Boston
Framingham
Natick
Wellesley
Needham
Ashland
Sherborn
Dover
Dedham
Milton
Quincy
Hull
Holliston
Westwood
Braintree
Weymouth
Hingham
Cohasset
Scituate
Medway
Millis
Medfield
Norwood
Canton
Randolph
Holbrook
Norwell
Bellingham
Franklin
Norfolk
Walpole
Sharon
Stoughton
Avon
Abington
Rockland
Hanover
Marshfield
Wrentham
Foxborough
Whitman
Pembroke
Hanson
Easton
East Bridgewater
Plainville
Mansfield
North Attleborough
Halifax
Kingston
Norton
Plympton
Attleboro
Taunton
Middleborough
Carver
Plymouth
Seekonk
Rehoboth
Dighton
Berkley
Lakeville
Swansea
Somerset
Freetown
Rochester
Wareham
Fall River
New Bedford
Acushnet
Mattapoisett
Marion
Bourne
Sandwich
Barnstable
Yarmouth
Dennis
Brewster
Orleans
Eastham
Wellfleet
Truro
Provincetown
Fairhaven
Westport
Dartmouth
Mashpee
Falmouth

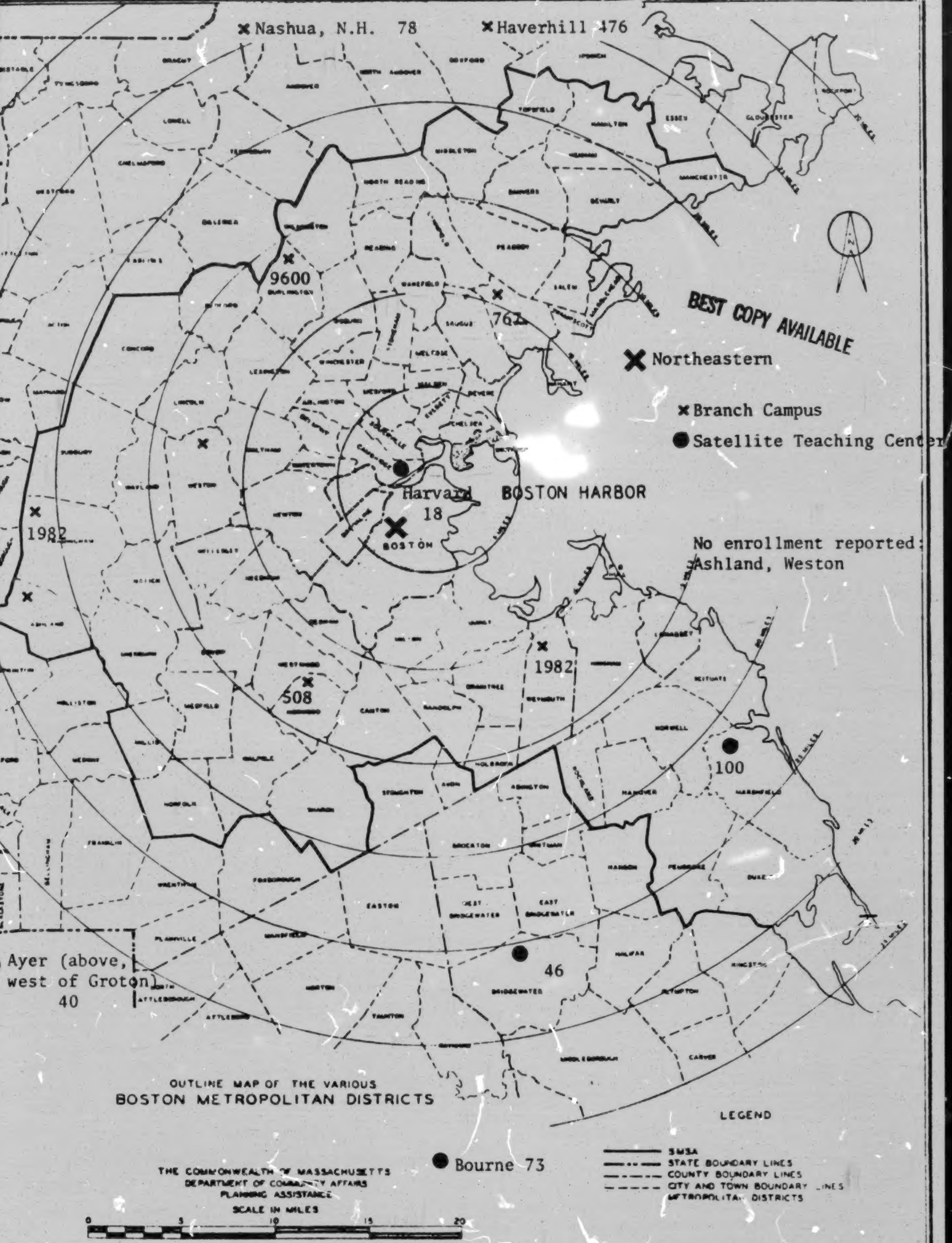
BEST COPY AVAILABLE


Bridgewater
Branch Campus
Hyannis Summer School 240 (Summer enrollment)
SUFFOLK
NORFOLK
PLYMOUTH
BRISTOL
BARNSTABLE
SUDBURY
WAYLAND
WESTON
WALTHAM
CAMBRIDGE
NEWTON
BROOKLINE
BOSTON
HULL
FRAMINGHAM
WELLESLEY
NATICK
NEEDHAM
DEDHAM
QUINCY
MILTON
ASHLAND
SHERBORN
DOVER
WESTWOOD
HINGHAM
COHASSET
SCITUATE
HOLLISTON
MEDFIELD
NORWOOD
CANTON
BRAINTREE
RANDOLPH
WEYMOUTH
HOLBROOK
NORWELL
MILLIS
MEDWAY
WALPOLE
NORFOLK
SHARON
STOUGHTON
AVON
ABINGTON
ROCKLAND
HANOVER
MARSHFIELD
BELLINGHAM
FRANKLIN
WRENTHAM
FOXBOROUGH
BROCKTON
WHITMAN
PEMBROKE
HANSON
DUXBURY
EASTON
WEST BRIDGEWATER
EAST BRIDGEWATER
PLAINVILLE
MANSFIELD
HALIFAX
KINGSTON
PLYMPTON
BRIDGEWATER
NORTH ATTLEBOROUGH
NORTON
ATTLEBORO
RAYNHAM
TAUNTON
MIDDLEBOROUGH
CARVER
PLYMOUTH
SEEKONK
DIGHTON
BERKLEY
LAKEVILLE
SWANSEA
SOMERSET
FREETOWN
ROCHESTER
WAREHAM
FALL RIVER
NEW BEDFORD
ACUSHNET
MATTAPOISETT
FAIRHAVEN
MARION
BOURNE
SANDWICH
BARNSTABLE
YARMOUTH
DENNIS
BREWSTER
HARWICH
CHATHAM
ORLEANS
EASTHAM
WELLFLEET
TRURO
PROVINCETOWN
MASHPEE
FALMOUTH
WESTPORT
DARTMOUTH

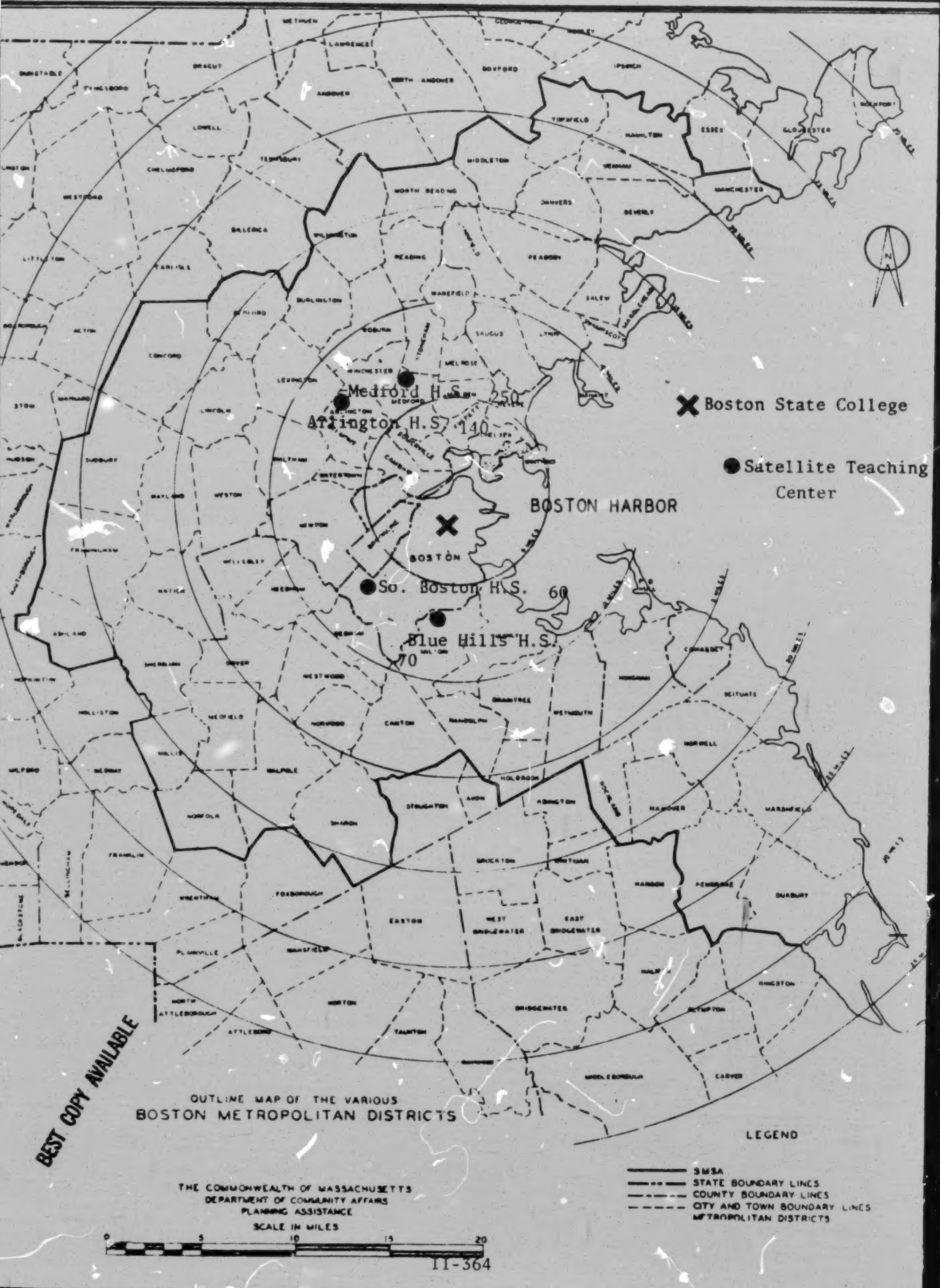
BEST COPY AVAILABLE


✕ Bristol Community College
● Satellite Teaching Center
SUFFOLK
NORFOLK
PLYMOUTH
BRISTOL
BARNSTABLE
Norfolk State Prison (with STEP) 50-60
King Phillip Reg'l H.S. 21-79
Attleboro H.S. 52-145
Taunton Regional Vocational H.S. 92
New Bedford H.S. 49-74
SUDBURY
WAYLAND
WESTON
WALTHAM
WATERTOWN
CAMBRIDGE
WINTHROP
NEWTON
BROOKLINE
BOSTON
FRAMINGHAM
WELLESLEY
NATICK
NEEDHAM
HULL
ASHLAND
SHERBORN
DOVER
DEDHAM
MILTON
QUINCY
COHASSET
WESTWOOD
HINGHAM
HOLLISTON
NORWOOD
CANTON
BRAINTREE
RANDOLPH
HOLBROOK
WEYMOUTH
SCITUATE
MEDFIELD
MILLIS
MEDWAY
WALPOLE
NORWELL
NORFOLK
SHARON
STOUGHTON
AVON
ROCKLAND
MANOVER
MARSHFIELD
ABINGTON
FRANKLIN
BELLINGHAM
BROCKTON
WHITMAN
PEMBROKE
HANSON
DUXBURY
FOXBOROUGH
WRENTHAM
EASTON
WEST BRIDGEWATER
EAST BRIDGEWATER
PROVINCETOWN
TRURO
NORTH ATTLEBOROUGH
HALIFAX
KINGSTON
BRIDGEWATER
NORTON
PLYMPTON
WELLFLEET
ATTLEBORO
RAYNHAM
TAUNTON
MIDDLEBOROUGH
CARVER
PLYMOUTH
EASTHAM
SEEKONK
REHOBOTH
DIGHTON
BERKLEY
LAKEVILLE
WAREHAM
ORLEANS
SWANSEA
FREETOWN
ROCHESTER
BREWSTER
SOMERSET
FALL RIVER
BOURNE
SANDWICH
DENNIS
MARION
BEDFORD
ACUSHNET
BARNSTABLE
YARMOUTH
HARWICH
CHATHAM
MATTAPOISETT
NEW
FAIRHAVEN
MASHPEE
WESTPORT
DARTMOUTH
FALMOUTH

BEST COPY AVAILABLE


Nashua, N.H. 78
Haverhill 476
9600
762
Northeastern
Branch Campus
Satellite Teaching Center
Harvard
18
BOSTON HARBOR
BOSTON
No enrollment reported;
Ashland, Weston
1982
1982
508
100
46
Ayer (above,
west of Groton)
40
Bourne 73
LOWELL
CHELMSFORD
BURLINGTON
WOBURN
READING
PEABODY
SALEM
DANVERS
BEVERLY
MANCHESTER
GLOUCESTER
ESSEX
HAMILTON
TOPSFIELD
MIDDLETON
NORTH READING
WAKEFIELD
SAUGUS
LYNN
MELROSE
MALDEN
REVERE
CHELSEA
EVERETT
MEDFORD
WINCHESTER
LEXINGTON
ARLINGTON
SOMERVILLE
CAMBRIDGE
LINCOLN
CONCORD
WALTHAM
WATERTOWN
WESTON
NEWTON
WELLESLEY
NATICK
NEEDHAM
DEDHAM
MILTON
QUINCY
BRAINTREE
WEYMOUTH
HINGHAM
COHASSET
SCITUATE
NORWELL
MARSHFIELD
HANOVER
ROCKLAND
ABINGTON
HOLBROOK
RANDOLPH
CANTON
STOUGHTON
AVON
BROCKTON
WESTWOOD
NORWOOD
WALPOLE
MEDFIELD
SHARON
FOXBOROUGH
EASTON
WEST BRIDGEWATER
EAST BRIDGEWATER
BRIDGEWATER
HANSON
PEMBROKE
DUXBURY
HALIFAX
KINGSTON
PLYMPTON
MIDDLEBOROUGH
CARVER
TAUNTON
RAYNHAM
NORTON
MANSFIELD
ATTLEBORO
NORTH ATTLEBOROUGH
PLAINVILLE
WRENTHAM
FRANKLIN
NORFOLK
MEDWAY
MILLIS
HOLLISTON
SHERBORN
ASHLAND
SUDBURY
WAYLAND
DRACUT
TEWKSBURY
ANDOVER
NORTH ANDOVER
BOXFORD
IPSWICH
ROCKPORT
LEGEND
SMSA
STATE BOUNDARY LINES
COUNTY BOUNDARY LINES
CITY AND TOWN BOUNDARY LINES
METROPOLITAN DISTRICTS
THE COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF COMMUNITY AFFAIRS
PLANNING ASSISTANCE
SCALE IN MILES
0
5
10
15
20

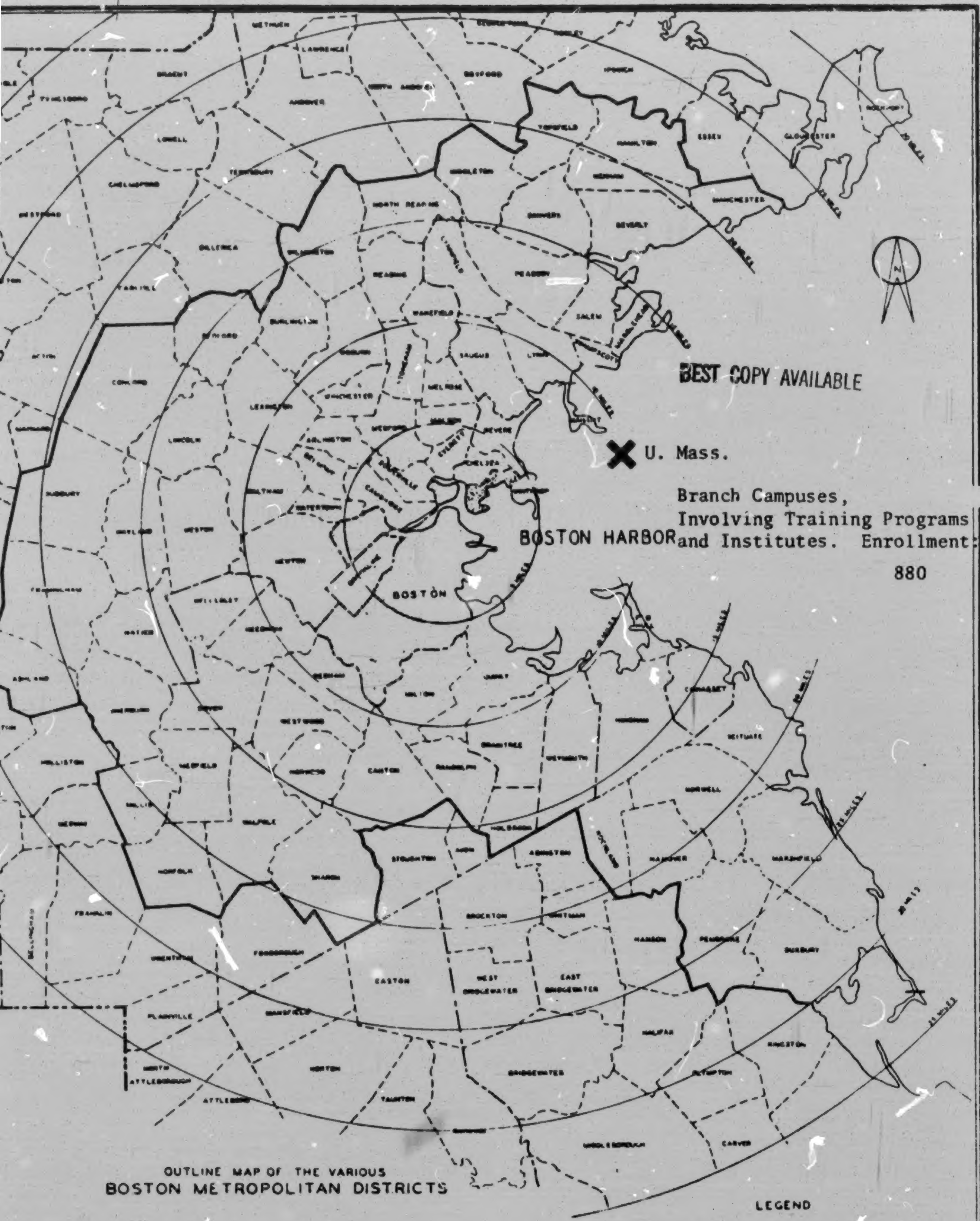
OUTLINE MAP OF THE VARIOUS
BOSTON METROPOLITAN DISTRICTS


Medford H.S.
250
Arlington H.S.
140
Boston State College
Satellite Teaching Center
BOSTON HARBOR
BOSTON
So. Boston H.S.
60
Blue Hills H.S.
70
N
LEGEND
SMSA
STATE BOUNDARY LINES
COUNTY BOUNDARY LINES
CITY AND TOWN BOUNDARY LINES
METROPOLITAN DISTRICTS
SCALE IN MILES
0
5
10
15
20
METHUEN
LAWRENCE
DRACUT
ANDOVER
NORTH ANDOVER
BOXFORD
IPSWICH
TOPSFIELD
HAMILTON
ESSEX
GLOUCESTER
ROCKPORT
LOWELL
TEWKSBURY
CHELMSFORD
MIDDLETON
WENHAM
MANCHESTER
WESTFORD
NORTH READING
DANVERS
BEVERLY
BILLERICA
WILMINGTON
LITTLETON
CARLISLE
READING
PEABODY
BURLINGTON
WAKEFIELD
SALEM
BEDFORD
ACTON
WOBURN
SAUGUS
LYNN
CONCORD
WINCHESTER
MELROSE
LEXINGTON
MAYNARD
STOW
LINCOLN
ARLINGTON
MEDFORD
SOMERVILLE
CAMBRIDGE
WALTHAM
WATERTOWN
SUDBURY
WAYLAND
WESTON
NEWTON
BROOKLINE
WELLESLEY
FRAMINGHAM
NATICK
NEEDHAM
ASHLAND
DEDHAM
MILTON
SHERBORN
DOVER
WESTWOOD
COHASSET
HINGHAM
HOLLISTON
MEDFIELD
NORWOOD
CANTON
RANDOLPH
BRAINTREE
WEYMOUTH
SCITUATE
MILLIS
WALPOLE
HOLBROOK
NORWELL
MILFORD
NORFOLK
SHARON
STOUGHTON
AVON
ABINGTON
ROCKLAND
HANOVER
MARSHFIELD
FRANKLIN
BROCKTON
WHITMAN
WRENTHAM
FOXBOROUGH
HANSON
PEMBROKE
DUXBURY
EASTON
WEST BRIDGEWATER
EAST BRIDGEWATER
PLAINVILLE
MANSFIELD
HALIFAX
KINGSTON
NORTH ATTLEBOROUGH
NORTON
BRIDGEWATER
PLYMPTON
ATTLEBORO
TAUNTON
RAYNHAM
MIDDLEBOROUGH
CARVER

OUTLINE MAP OF THE VARIOUS
BOSTON METROPOLITAN DISTRICTS

THE COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF COMMUNITY AFFAIRS
PLANNING ASSISTANCE

BEST COPY AVAILABLE


METHUEN
LAWRENCE
GEORGETOWN
ROWLEY
IPSWICH
BOXFORD
NORTH ANDOVER
ANDOVER
TYNGSBORO
DRACUT
LOWELL
TOPSFIELD
HAMILTON
ESSEX
GLOUCESTER
ROCKPORT
TEWKSBURY
CHELMSFORD
MIDDLETON
WENHAM
MANCHESTER
NORTH READING
DANVERS
BEVERLY
WESTFORD
BILLERICA
WILMINGTON
READING
PEABODY
SALEM
CARLISLE
BURLINGTON
WAKEFIELD
BEDFORD
ACTON
CONCORD
WOBURN
SAUGUS
LYNN
MELROSE
WINCHESTER
LEXINGTON
MEDFORD
MALDEN
REVERE
LINCOLN
ARLINGTON
CHELSEA
WALTHAM
WATERTOWN
SUDBURY
WESTON
WAYLAND
NEWTON
BOSTON
FRAMINGHAM
WELLESLEY
NATICK
NEEDHAM
DEDHAM
MILTON
QUINCY
ASHLAND
DOVER
WESTWOOD
COHASSET
HINGHAM
SCITUATE
BRAINTREE
WEYMOUTH
HOLLISTON
MEDFIELD
NORWOOD
CANTON
RANDOLPH
NORWELL
MILLIS
MEDWAY
WALPOLE
HOLBROOK
ABINGTON
HANOVER
MARSHFIELD
NORFOLK
SHARON
STOUGHTON
AVON
FRANKLIN
BROCKTON
WHITMAN
HANSON
PEMBROKE
DUXBURY
BELLINGHAM
WRENTHAM
FOXBOROUGH
EASTON
WEST BRIDGEWATER
EAST BRIDGEWATER
PLAINVILLE
MANSFIELD
HALIFAX
KINGSTON
NORTH ATTLEBOROUGH
NORTON
BRIDGEWATER
PLYMPTON
ATTLEBORO
TAUNTON
MIDDLEBOROUGH
CARVER
BOSTON HARBOR

BEST COPY AVAILABLE

✖ U. Mass.

Branch Campuses,
Involving Training Programs
and Institutes. Enrollment:
880

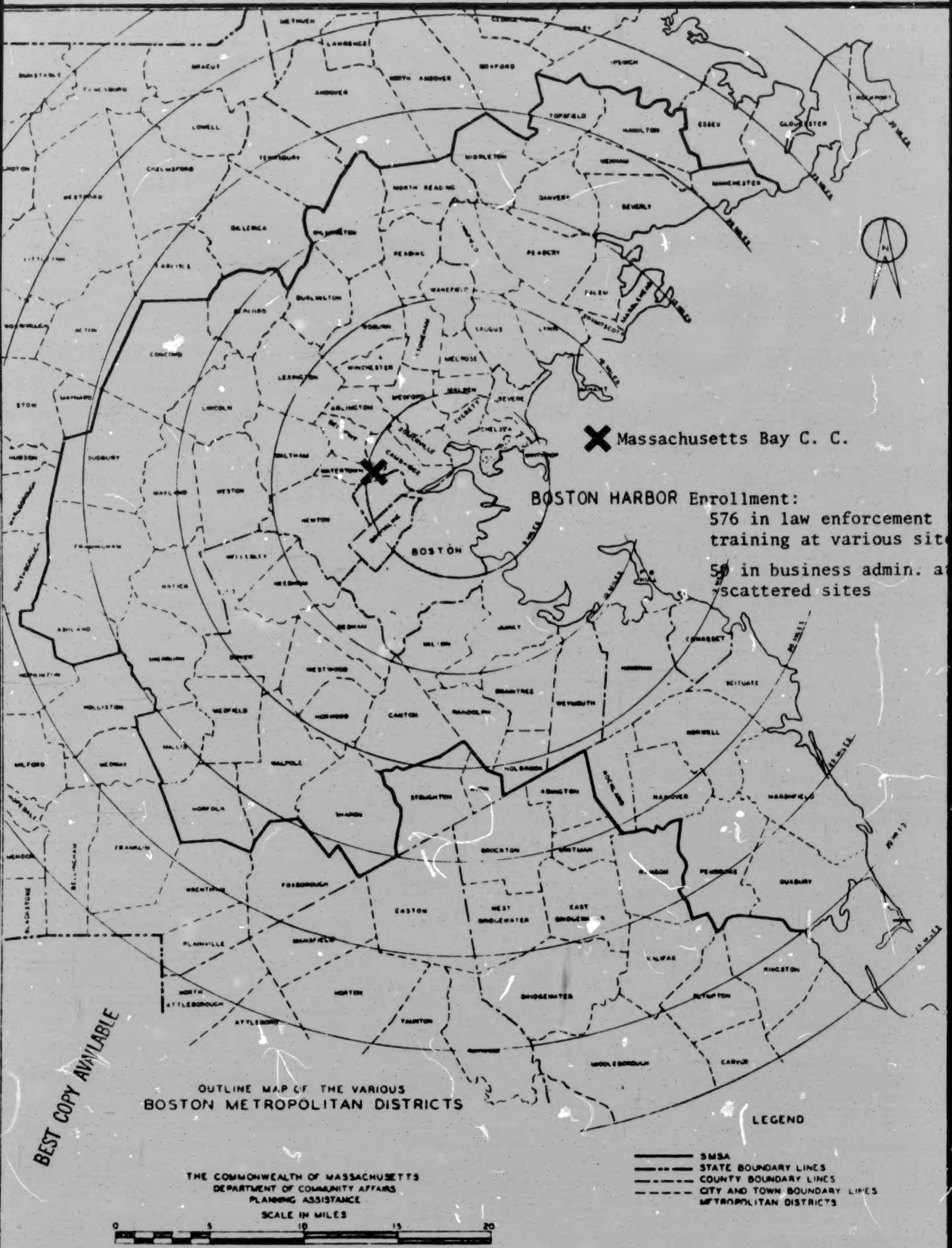
OUTLINE MAP OF THE VARIOUS
BOSTON METROPOLITAN DISTRICTS

LEGEND

SMSA
STATE BOUNDARY LINES
COUNTY BOUNDARY LINES
CITY AND TOWN BOUNDARY LINES
METROPOLITAN DISTRICTS

THE COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF COMMUNITY AFFAIRS
PLANNING ASSISTANCE

SCALE IN MILES
0 5 10 15 20


METHUEN
LAWRENCE
GEORGETOWN
DUNSTABLE
TYNGSBORO
DRACUT
NORTH ANDOVER
ANDOVER
BOXFORD
IPSWICH
ROCKPORT
GLOUCESTER
TOPSFIELD
HAMILTON
ESSEX
LOWELL
TEWKSBURY
MIDDLETON
WENHAM
MANCHESTER
CHELMSFORD
NORTH READING
DANVERS
BEVERLY
WESTFORD
BILLERICA
WILMINGTON
READING
PEABODY
LITTLETON
CARLISLE
BURLINGTON
WAKEFIELD
SALEM
MARBLEHEAD
SWAMPSCOTT
BOXBOROUGH
ACTON
BEDFORD
WOBURN
SAUGUS
LYNN
CONCORD
WINCHESTER
MELROSE
NAHANT
STOW
MAYNARD
LEXINGTON
LINCOLN
ARLINGTON
MEDFORD
MALDEN
REVERE
EVERETT
SOMERVILLE
CHELSEA
WINTHROP
HUDSON
SUDBURY
BELMONT
WALTHAM
CAMBRIDGE
WATERTOWN
WAYLAND
WESTON
NEWTON
BROOKLINE
BOSTON
FRAMINGHAM
WELLESLEY
NATICK
NEEDHAM
HULL
ASHLAND
DEDHAM
MILTON
QUINCY
COHASSET
HOPKINTON
SHERBORN
DOVER
WESTWOOD
HINGHAM
SCITUATE
BRAINTREE
WEYMOUTH
HOLLISTON
MEDFIELD
NORWOOD
CANTON
RANDOLPH
NORWELL
MILFORD
MEDWAY
MILLIS
WALPOLE
HOLBROOK
ROCKLAND
HANOVER
MARSHFIELD
NORFOLK
SHARON
STOUGHTON
AVON
ABINGTON
FRANKLIN
BROCKTON
WHITMAN
HANSON
PEMBROKE
DUXBURY
MENDON
BELLINGHAM
WRENTHAM
FOXBOROUGH
EASTON
WEST BRIDGEWATER
EAST BRIDGEWATER
BLACKSTONE
PLAINVILLE
MANSFIELD
HALIFAX
KINGSTON
NORTH ATTLEBOROUGH
NORTON
BRIDGEWATER
PLYMPTON
ATTLEBORO
TAUNTON
RAYNHAM
MIDDLEBOROUGH
CARVER
N
LEGEND
SMSA
STATE BOUNDARY LINES
COUNTY BOUNDARY LINES
CITY AND TOWN BOUNDARY LINES
METROPOLITAN DISTRICTS
THE COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF COMMUNITY AFFAIRS
PLANNING ASSISTANCE
SCALE IN MILES
0
5
10
15
20

✖ Massachusetts Bay C. C.

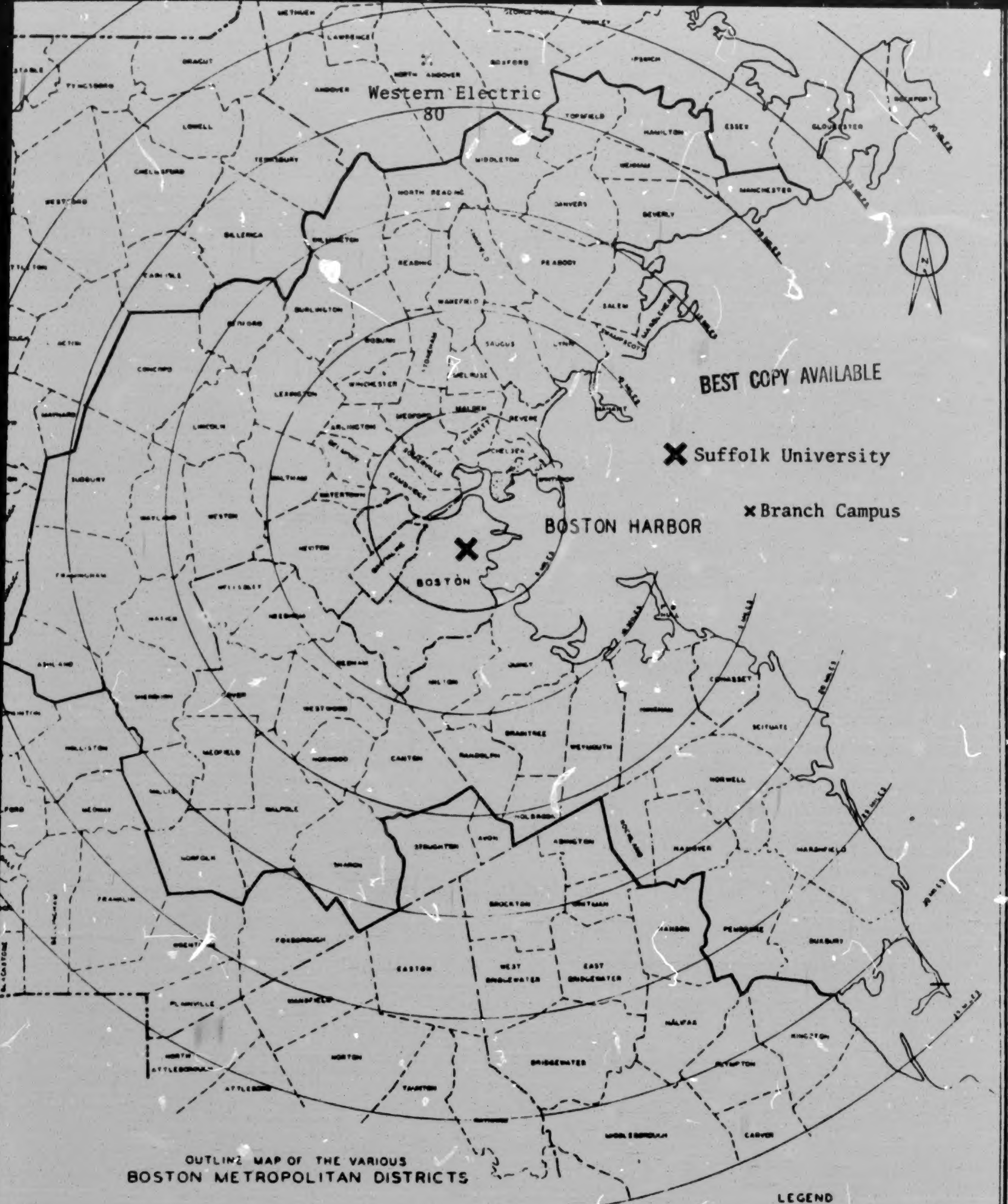
BOSTON HARBOR Enrollment:

576 in law enforcement
training at various sit

50 in business admin. a
scattered sites

OUTLINE MAP OF THE VARIOUS
BOSTON METROPOLITAN DISTRICTS

BEST COPY AVAILABLE

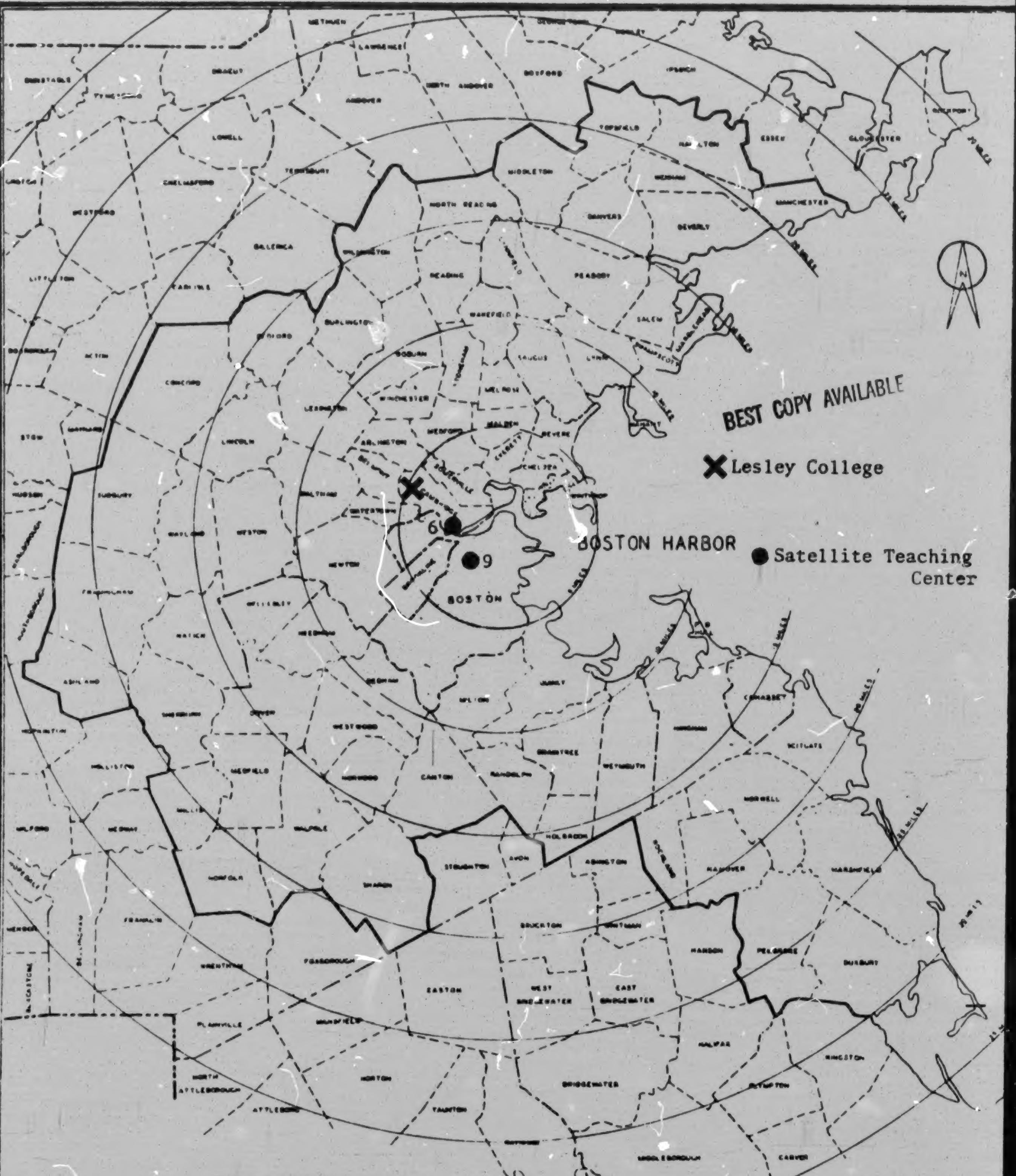

Western Electric
80
Suffolk University
Branch Campus
BOSTON HARBOR
BOSTON
LEGEND
SMSA
STATE BOUNDARY LINES
COUNTY BOUNDARY LINES
CITY AND TOWN BOUNDARY LINES
METROPOLITAN DISTRICTS
SCALE IN MILES
0
5
10
15
20
N

BEST COPY AVAILABLE

OUTLINE MAP OF THE VARIOUS
BOSTON METROPOLITAN DISTRICTS

THE COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF COMMUNITY AFFAIRS
PLANNING ASSISTANCE

BEST COPY AVAILABLE


METHUEN
LAWRENCE
NORTH ANDOVER
ANDOVER
BOXFORD
IPSWICH
DUNSTABLE
TYNGSBORO
DRACUT
LOWELL
TEWKSBURY
CHELMSFORD
WESTFORD
BILLERICA
TOPSFIELD
HAMILTON
ESSEX
GLOUCESTER
ROCKPORT
WENHAM
MANCHESTER
MIDDLETON
NORTH READING
DANVERS
BEVERLY
WILMINGTON
READING
PEABODY
LITTLETON
CARLISLE
BURLINGTON
WAKEFIELD
SALEM
BEDFORD
WOBURN
SAUGUS
LYNN
SWAMPSCOTT
MARBLEHEAD
ACTON
CONCORD
LEXINGTON
WINCHESTER
MELROSE
NAHANT
STOW
MAYNARD
LINCOLN
ARLINGTON
MEDFORD
MALDEN
REVERE
EVERETT
CHELSEA
SOMERVILLE
WINTHROP
HUDSON
SUDBURY
WALTHAM
WATERTOWN
WAYLAND
WESTON
NEWTON
BOSTON
BOSTON HARBOR
FRAMINGHAM
WELLESLEY
NATICK
NEEDHAM
DEDHAM
MILTON
QUINCY
ASHLAND
HOPKINTON
SHERBORN
DOVER
WESTWOOD
BRAINTREE
HINGHAM
COHASSET
SCITUATE
HOLLISTON
MEDFIELD
NORWOOD
CANTON
RANDOLPH
WEYMOUTH
MILLIS
WALPOLE
NORWELL
MILFORD
MEDWAY
HOLBROOK
ABINGTON
ROCKLAND
HANOVER
MARSHFIELD
NORFOLK
SHARON
STOUGHTON
AVON
FRANKLIN
BROCKTON
WHITMAN
HANSON
PEMBROKE
DUXBURY
MENDON
BELLINGHAM
WRENTHAM
FOXBOROUGH
EASTON
WEST BRIDGEWATER
EAST BRIDGEWATER
PLAINVILLE
MANSFIELD
HALIFAX
KINGSTON
NORTH ATTLEBOROUGH
NORTON
BRIDGEWATER
PLYMPTON
ATTLEBORO
TAUNTON
RAYNHAM
MIDDLEBOROUGH
CARVER
6
9

✖ Lesley College

● Satellite Teaching Center

OUTLINE MAP OF THE VARIOUS
BOSTON METROPOLITAN DISTRICTS

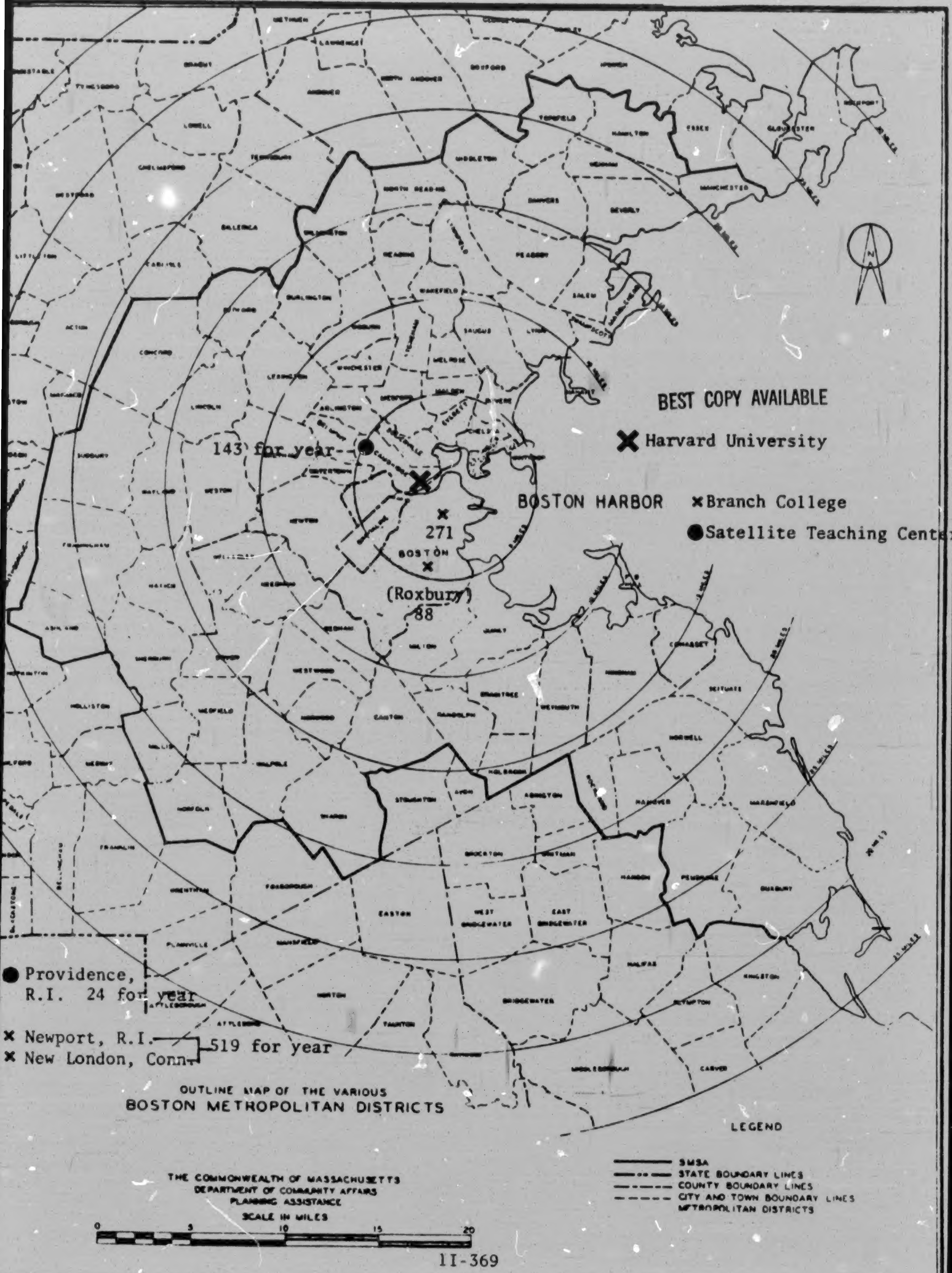
LEGEND

SMSA
STATE BOUNDARY LINES
COUNTY BOUNDARY LINES
CITY AND TOWN BOUNDARY LINES
METROPOLITAN DISTRICTS

● Wixon Middle School
Dennis

THE COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF COMMUNITY AFFAIRS
PLANNING ASSISTANCE

SCALE IN MILES
0 5 10 15 20


BEST COPY AVAILABLE
✖ Harvard University
✖ Branch College
● Satellite Teaching Cent
BOSTON HARBOR
143 for year
271
BOSTON
(Roxbury)
88
● Providence, R.I. 24 for year
✖ Newport, R.I.
✖ New London, Conn.
519 for year
LEGEND
SMSA
STATE BOUNDARY LINES
COUNTY BOUNDARY LINES
CITY AND TOWN BOUNDARY LINES
METROPOLITAN DISTRICTS
SCALE IN MILES
0
5
10
15
20
N

OUTLINE MAP OF THE VARIOUS
BOSTON METROPOLITAN DISTRICTS

THE COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF COMMUNITY AFFAIRS
PLANNING ASSISTANCE

BEST COPY AVAILABLE

E. Cooperation and Coordination

DISCUSSION. II-373

1. Explanation and Key to Cooperation Tables. II-375

2. Tables (Organized by Substate Region). II-376
   Table: Inventory of Cooperative Efforts with Other Institutions of Higher Education
   Table: Inventory of Programs in Cooperation with Agencies or Organizations

DISCUSSION OF COOPERATION AND COORDINATION

There are a variety of forms of cooperation among academic institutions and other organizations in programs of continuing and part-time education. The relationships between individual institutions, and such diverse community organizations as businesses, government agencies, ad hoc citizens groups, and other organizations comprise the most significant elements of cooperation. The least common form of cooperation is among institutions involved in continuing education.

In general, current forms of cooperation in continuing education serve the purposes of reaching out to special clientele groups, both disadvantaged groups and professional or other special interest groups. Cooperation has not yet been utilized as a means to sharing of resources among academic institutions and to avoidance of duplication among programs.

There are several formal and informal consortia operating in the State, the most significant of which are the Worcester Consortium for Higher Education, the Cooperating Colleges of Greater Springfield, the Five College Cooperative Program (centered in the Amherst area), and the Southeastern Association for Cooperation in Higher Education in Massachusetts. While some of these institutions actively cooperate in joint projects, course exchange, and the like, few of these activities involve the continuing education divisions. Cross-registration is as yet of little value to evening students who take only one or two courses each term. Likewise, facilities sharing, except in the case of complex technical equipment, benefits the part-time, nonresident student to a lesser degree than his full-time counterpart.

However, various cooperative ventures other than consortia have been undertaken in Massachusetts and do affect the continuing education or part-time student. One example is the associate corrections program operated by Holyoke and Berkshire Community Colleges to train correction personnel. Middlesex Community College and Boston State are planning to jointly offer education courses at the former's extension center in Arlington. Other cooperative programs between academic institutions are detailed in the following tables.

Much more prevalent in Massachusetts than interinstitutional cooperation is cooperation between an institution and an element of the community. Many continuing education programs, especially those at public institutions, have a contract with a business, government agency, or community group to provide specific courses, whether on-site or at the college. These range from large satellite operations at military installations (six schools, public and private, offer courses at Westover Air Force Base in Chicopee) to a single class aimed at training employees of a local small business. Many schools cooperate with local hospitals to ptovide general education courses for nursing students. Others provide skill training for a local agency concerned with aiding the disadvantaged.

Typical of such types of cooperative relationships is Holyoke

Community College's cultural series at the Wistariahurst Museum, and short courses to aid local businesses through the Greater Holyoke Chamber of Commerce. It has also contracted with the Holyoke Model Cities agency to train paraprofessionals. A similar pattern emerges for most other community colleges. U./Mass.-Amherst has offered short-term workshops and conferences designed for specific client groups, such as a health care facility management seminar and a journalism program, both undertaken with the appropriate professional organizations, and conducted at the UMA Conference Center.

Fewer private institutions have become involved in this sort of cooperative venture, with the exception of those in the Boston area. Harvard's Commission on Extension Courses provides educational services on a contract basis to Cambridge Model Cities; Wheelock College cooperates with a variety of agencies in its Supplementary Training Program. Several other similar programs are listed in the tables.

The major determinants of such activities seem to be two: 1) the commitment of an institution to provide its educational resources to groups in the community it serves which require such assistance; and 2) an assurance--through government grant or promise of a paying clientele--that the financial costs of the undertaking will be met. While it may be true that some institutions engage in such efforts without expecting to break even financially, the majority of these programs appear to entail an outside source of funding. Continuing education deans and directors, many of whom display a real commitment to the needs of the community, often seek out such relationships, to the benefit of both the institution and the community they serve.

Another significant aspect of cooperation in continuing education involves the relationships between academic institutions and employers. These are discussed in Section II.L.

II.E.1. Explanation and Key to Cooperation Tables

Cooperation among providers of continuing and part-time education is catalogued in two types of tables. The first lists cooperative efforts of institutions of higher education regarding courses, academic programs,, planning, facilities, etc. The second type involves cooperation between an educational institution and other agencies and organizations. These types of cooperation cover a variety of participants: government agencies, community groups, businesses, museums, and the like.

The second type of cooperation — with agencies and organizations — is related to outreach efforts undertaken by a school. In one sense, contacts with and responsiveness to the community is cooperation. The informal cooperation can lead to joint workshop or course offerings, or the establishment of a branch or satellite operation. Similarly, local school systems often receive in-service training for their teachers — in the form of a course or two taught in the late afternoon — from continuing education programs. Businesses often engage the services of a school for their employees in much the same way. While all these efforts clearly involve the joint effort of two or more organizations, they have been excluded from those cooperation tables for two reasons: 1) they are catalogued in the chapter on branch and satellite campuses, and 2) they are not the sort of institutionalized relationships involving the commitment of resources by participating organizations that is normally considered interinstitutional cooperation.

PROGRAM TYPE

a - joint or contract course(s)
b - joint degree program
c - cooperative planning
d - cooperative higher education center
e - research grants-in-aid
f - training programs/institutes
g - in-service training
h - joint curriculum development
i - joint course listing
k - facilities sharing
x - cross-registration

FUNDING TYPE

A - Federal grant or conract
B - State grant or contract
C - local grant or contract
D - private grant or contract
E - funded, unspecified source
F - institutional budget item
G - tuition

II.E.2. Tables by Region

--Inventory of Cooperative Efforts with Other Institutions of Higher Education

--Inventory of Programs in Cooperation with Agencies or Organizations

I. INVENTORY OF COOPERATIVE EFFORTS WITH OTHER INSTITUTIONS OF HIGHER EDUCATION

WESTERN REGION

BEST COPY AVAILABLE

PROGRAM NAME	INSTITUTIONS	PROGRAM TYPE	FUNDING TYPE	NO. OF STUDENTS	YEAR STARTED	PURPOSE	WHO INITIATED	Notes
Corrections Program-AS	Holyoke C.C. Berkshire C.C.	b	G	23	1972	train Berkshire County corrections personnel	Holyoke C.C.	
Audio Tutorial	Holyoke C.C. Amherst College	f	A	28	1972	train disadvantaged students	Holyoke C.C.	
Five College Cooperative Programs	U. Mass. - Amherst Smith College Mt. Holyoke College Hampshire College Amherst College	d	F	52	NR	broaden educational facilities for Ph.D.'s	Five College Coordinating Committee	
		[illegible];d	F	3	1973	joint courses & cross registration for continuing ed.		
Joint Bachelor's Program	U. Mass. - Amherst Continuing Ed. School of Ed. Malcolm X College	b	NR	46	1972	opportunity to earn bachelor's degree	Malcolm X College	
Library Science Cross-Registration	U. Mass. - Amherst Univ. of Rhode Island	b	NR	35	1970	local requests for program	U. Mass.	
Tri-College Program	American International Springfield College Western New England	x	NR	--	NR	course exchange	NR	
Cooperating Colleges of Greater Springfield	Springfield College American International Western New England Springfield Tech.C.C. Westfield State Holyoke C.C. Bay Path Jr. College Our Lady of the Elms	h	NR	NR	NR	sharing of area resources and library materials	NR	

BEST COPY AVAILABLE

II. INVENTORY OF PROGRAMS IN COOPERATION WITH AGENCIES OR ORGANIZATIONS

WESTERN REGION

INSTITUTION/PROGRAM NAME	OTHER INSTITUTIONS	PROGRAM TYPE	FUNDING TYPE	NO. OF STUDENTS	YEAR STARTED	PURPOSE	WHO INITIATED	Notes
Holyoke C.C.*								
Cultural Series	Wistariahurst Museum	a	NR	50	1972	provide cultural programs	Holyoke C.C.	
Project Impact	Holyoke Model Cities	f	A	28	1972	train paraprofessionals	Holyoke C.C.-Model Cities	
Continuing Program in Business Education	Greater Holyoke Chamber of Commerce	a	NR		planned 1973	variety of short courses to aid local businesses	NR	
U. Mass. - Amherst*								
Pittsfield MBA/MS in Management	General Electric Corp.	a	E	33	1959	allow p-t study for GE employees	U. Mass. and GE	
Career Opportunity Program	Worcester Springfield school systems Brooklyn Model Cities Community Action Council Headstart	b,c	A	301	1971	provide education courses	Federal government	
University Independent Study	American Education Publications (subsidiary of Xerox Corp.) 11 school consortium (nationwide)	a	NR	--	Planned 1973	Non-credit correspondence courses	Xerox Corp.	
Concord/Carlisle School Systems	Concord Teacher's Assoc. Concord/Carlisle Teacher's Assoc.	d	NR	98	1972	to expand higher education opportunities	Concord School System	
Green River Project	Dept. of Public Works	e	A	--	1972	Study Green River Pollution	Federal Government	
New Career Training	Springfield Action Commission Inc.	f	A	10	1972	job-oriented trng. for paraprofessionals	Federal Government	
Health Care Facility Management	American College of Nursing Home Administrators (Mass. chapter)	f	NR	NR 20-30	1971	short course to train administrators	U. Mass.	
Journalism Program	New England Society of Newspaper Editors	a	NR	19	1971	training for journalists	U. Mass.	
Springfield Tech. C.C.*								
Core Nursing Program	Springfield Hospital	b	NR	120	n/a	NR	NR	

*Westover Air Force Base Programs:

Several schools offer courses at Westover A.F.B. in Chicopee, ranging from associate to masters degree programs. The schools, the number of students in each program, and the year started are as follows:

American International College - 294 - 1961
Western New England College - 60 to 90 - 1967
Springfield Tech. C.C. - 27 - 1971
Holyoke C.C. - 32 - 1971
Westfield State College - 42 - 1972
U. Mass. - Amherst - 24 - NR

BEST COPY AVAILABLE

I. INVENTORY OF COOPERATIVE EFFORTS WITH OTHER INSTITUTIONS OF HIGHER EDUCATION

CENTRAL REGION

PROGRAM NAME	INSTITUTIONS	PROGRAM TYPE	FUNDING TYPE	NO. OF STUDENTS	YEAR STARTED	PURPOSE	WHO INITIATED	Notes
Worcester Consortium for Higher Education	Quinsigamond C.C. Leicester Jr. C. Worcester Jr. C. Becker Jr. C. Holy Cross Assumption Clark Worcester Polytech. Worcester State Anna Maria	The Worcester Consortium for Higher Education, initiated in 1969, provides opportunities for cross-registration, faculty exchange, and joint sponsorship of speakers, and operates a bus connecting the member schools. Students must be attending their home institutions full-time in order to cross-register. Continuing education divisions of schools in the Consortium have published joint course listings in local newspapers. Most of the Consortium activities, however, involve full-time students.						
Merrimack Education Center Staff Development Program	Fitchburg State - CE Merrimack Education Center (MEC)	a	E	5 163	1971	opportunities for college credit for teachers	MEC	
Municipal Supervisory Employee Seminar	Framingham State U. Mass.	a	E	15	1972	train supervisors in town gov't.	town of Framingham	
State Purchasing Agents Seminar	Framingham State U. Mass.	f	E	60	1972	train agents	Commonwealth of Mass.	
Master of Arts in Special Education Consulting Teacher Program	Assumption U. of Vermont Mass. Dept. of Education Mass. Dept. of Mental Health	f	NR	--	planned 1973	planning grant proposal	request of school systems	
B.S. in General Studies	Clark Quinsigamond C.C. Mt. Wachusett C.C.	c	A	8 NR NR	1969	allow advanced degree for law enforcement A.S. graduates	Clark	

BEST COPY AVAILABLE

II. INVENTORY OF PROGRAMS IN COOPERATION WITH AGENCIES OR ORGANIZATIONS

CENTRAL REGION

INSTITUTION/PROGRAM NAME	OTHER INSTITUTIONS	PROGRAM TYPE	FUNDING TYPE	NO. OF STUDENTS	YEAR STARTED	PURPOSE	WHO INITIATED	Notes
Fitchburg State-CE	Fitchburg Public Schools	a	E	117	1972	graduate credit for teachers	Fitchburg Schools	
Worcester Polytech.-PT	U.S. Army	x	NR	8	1971	allow exchange students to enroll in ROTC courses	NR	
	Worcester County Jail	f	F	--	planned 1973	assist prisoner rehabilitation--credit courses	WPI - jail	
Anna Maria College-CE	St. Vincent Hospital	b	NR	10	1972	to allow speciality in anesthesia for B.S. in health studies students	--	
Quinsigamond C.C.-CE								
Industrial Mgmt. Degree	Central Manufacturers Employers Assoc.	h	D	110	1969	to provide up to 18 credits	Quinsigamond	
AA Degree	Worcester Art Museum	h	G	105	1970			
In-service courses	State Mutual Life Insurance Co.	h	D	45	1972	business courses	Quinsigamond	
Police seminars	Worcester Police Department	g	B,C	400	1972		Worcester Police Dept.	
Contract courses	various federal agencies	a	A	10-25 each	1968			
Facilities Sharing	Worcester Industrial Technical Institute	k	NR	NR	NR	use of shop facilities	NR	
Framingham State-CE								
Medfield Norfolk Project	Medfield State Hospital	g	NR	130	1972	training program for prisoners		

I. INVENTORY OF COOPERATIVE EFFORTS WITH OTHER INSTITUTIONS OF HIGHER EDUCATION

NORTHEAST REGION

Within the Northeast Region, there is no reported interinstitutional cooperation in part-time and postsecondary education programs.

BEST COPY AVAILABLE

II. INVENTORY OF PROGRAMS IN COOPERATION WITH AGENCIES OR ORGANIZATIONS

NORTHEAST REGION

INSTITUTION/PROGRAM NAME	OTHER INSTITUTIONS	PROGRAM TYPE	FUNDING TYPE	NO. OF STUDENTS	YEAR STARTED	PURPOSE	WHO INITIATED	Notes
Lowell State								
Master's Degree in Administration & Supervision - Internship	Lowell, Mass. Model Cities Lowell Schools	h;k	E;F	25	1970	internship to assist disadvantaged children and train degree candidates	Model Cities Lowell State	
Middlesex Community College*								
A.B.C.D. Extension Center (Degree)	Action for Boston Community Development	a	E;F	210	1971	NR	A.B.C.D.	
Arlington Extension Center+	Arlington School System	d	NR	120	1971	increase accessibility to programs	Arlington School System	
Woburn Extension Center	Woburn Chamber of Commerce	d	NR	60	1971	increase accessibility to programs	Woburn Chamber of Commerce	
Secretarial Courses	Raytheon Corp.	a	E;F	40	1971	NR	Raytheon	
Facilities Sharing	Shawsheen Voc.-Tech. School	k	NR	--	1973	use of shop facilities	NR	
North Shore Community College#								
Facilities Sharing	Essex Agricultural School	k	NR	--	1973	use of shop facilities	NR	
Northern Essex Community College								
Facilities Sharing	Whittier Voc.-Tech. School	k	NR	--	1973	use of shop facilities	NR	

* Middlesex Community College also provides contract courses in Cambridge (with Headstart and Cambridge Community Learning Center), Lowell (with Headstart, New Careers, and Model Cities), and Bedford (Hanscom Air Field). These programs are detailed on branch campus charts.

+ Includes graduate courses in education offered in cooperation with Boston State (initiated by Middlesex).

# North Shore also offers courses, on a contract basis, to employees of the New England Telephone Co., Lynn and Salem Hospitals, the Internal Revenue Service, and others.

BEST COPY AVAILABLE

I. INVENTORY OF COOPERATIVE EFFORTS WITH OTHER INSTITUTIONS OF HIGHER EDUCATION

SOUTHEAST REGION

PROGRAM NAME	INSTITUTIONS	PROGRAM TYPE	FUNDING TYPE	NO. OF STUDENTS	YEAR STARTED	PURPOSE	WHO INITIATED	Notes
Intercollegiate Computer Society, Inc.	Babson College Bentley College Brandeis Univ. Dean Jr. College Lesley College Suffolk Univ. Mass. State College System Salem State College Regis College Curry College	k	NR	--	1971	provide economies of scale on computer services--academic and administrative	Babson College	
Cross-registration--informal arrangement	Bristol C.C. Southeastern Mass. U.	x	NR	n/a	n/a	allow limited number of students to cross-register	NR	
Graduate course for teachers	Cape Cod C.C. U. Mass. School of Education	NR	NR	130	1972	NR	NR	

BEST COPY AVAILABLE

II. INVENTORY OF PROGRAMS IN COOPERATION WITH AGENCIES OR ORGANIZATIONS

SOUTHEAST REGION

INSTITUTION/PROGRAM NAME	OTHER INSTITUTIONS	PROGRAM TYPE	FUNDING TYPE	NO. OF STUDENTS	YEAR STARTED	PURPOSE	WHO INITIATED	Notes
Dean Junior College								
Cooperative Enrichment Program	Franklin H.S. Milford H.S.	x	NR	9	1971	allow high school students opportunity to earn college credit	joint	
Community Economic Development Workshop	Franklin Industrial Development Commission Franklin Chamber of Commerce Small Business Administration	a	NR	70	1972	community service program	NR	
Creative Retirement Workshop	Franklin Council on Aging Mass. Office of Elder Affairs	a	NR	300	1971	one-time workshop		
Southeastern Mass. Univ.								
New Tech. Orff Schulwerk	Henry W. Hull School	a	NR	27	1972	NR	NR	
Courses	St. Luke's Hospital	a	NR	99	1972	NR	NR	
Math for teachers	Fall River Middle School	a	NR	19	1972	NR	NR	
Bristol C.C.*								
Cape Cod C.C.								
High School Scholars	local high schools	x	NR	18	1971	allow high school students to earn college credit	NR	
College credit courses	Cape Playhouse	a	NR	90	1970	summer program	NR	
GED prep	Barnstable County Jail	f	NR	7	NR	preparation for h.s. equivalency exam for inmates	NR	
Boating courses	Barnstable Voc.-Tech. H.S.	a	NR	35	1973	non-credit courses	NR	
	Heritage Plantation	a	NR	NR	NR	credit and non-credit courses	NR	
Massasoit C.C.								
New Careers	Self-Help, Inc.	a	A	20	1968	aid New Careers in providing courses	Self Help, Inc.	
Correctional Rehabilitation Education Assisrance	Mass. Correctional Institutions--Plymouth and Bridgewater	a	E	75-100	1972	provide education to inmates	Massasoit	
Elderly	City of Brockton	e	F	100	1972	*provide any educational services to elderly	both	
Child Care	City of Brockton Metropolitan Day Care Centers	g	PLANNED			training day care personnel	both	

* Bristol operates several satellite teaching centers (at Norfolk State Prison and Dever and Taunton State Hospitals) that are detailed on the branch campus chart.

BEST COPY AVAILABLE

I. INVENTORY OF COOPERATIVE EFFORTS WITH OTHER INSTITUTIONS OF HIGHER EDUCATION

BOSTON REGION

PROGRAM NAME	INSTITUTIONS	PROGRAM TYPE	FUNDING TYPE	NO. OF STUDENTS	YEAR STARTED	PURPOSE	WHO INITIATED	Notes
Computer Science	Babson College Suffolk University	k	NR	NR	NR	computer terminals linked	NR	
Physics/Chemistry	Suffolk University MIT	k	NR	NR	NR	computer terminals linked	NR	
Residential Property Management	Bentley College University of Maine	k	F	35	NR	to develop more efficient management	Bentley	
Financial Management-Pharmacy	Bentley College Mass. College of Pharmacy	h;k	F	50	1973	"	Bentley	
Continuing Education Council	Boston University Northeastern U. Tufts Simmons U.Mass-Boston	a	NR	NR	NR	NR	NR	
Satellite Training Center	Boston State Middlesex C.C.	a	NR	NR	planned	offer graduate courses in education	Middlesex	
Course Exchange	Emmanuel College New England Conserv. Wheelock College Hebrew College Simmons College	x	F	NR	NR	utilize area resources	NR	
Double-degree Program	Hebrew College Simmons College	b	NR	7	1968	save time for students working for 2 BA's	NR	
Instructional Scientific Equipment Program	Emmanuel College Simmons College	k	A	--	1968	sharing science equipment	NR	
Library Privileges	Emmanuel College Simmons College	k	F	--	1966	share library facilities	NR	
Exchange Program	MIT Wellesley College	x	F	193	1968	expand offerings	both	

BEST COPY AVAILABLE

II. INVENTORY OF PROGRAMS IN COOPERATION WITH AGENCIES OR ORGANIZATIONS

BOSTON REGION

INSTITUTION/PROGRAM NAME	OTHER INSTITUTIONS	PROGRAM TYPE	FUNDING TYPE	NO. OF STUDENTS	YEAR STARTED	PURPOSE	WHO INITIATED	Notes
Curry College Drug Education Program	Town of Milton	a	NR	NR	1972	NR	NR	
Wheelock College Supplementary Training Program	Office of Child Development (HEW)	a	A;B	141	1967	training programs	NR	
	Cambridge Headstart-Self-Help				1967			
	Brockton Headstart				1967			
	Lynn Headstart				1967			
	Cambridge Follow Through				1969			
	New Careers				1970			
	Division of Employment Security				1970			
	Cambridge Model Cities				1970			
Workshops	Greater Boston Teachers Center	a	G	2	1972	NR	Greater Boston Teachers Center	
Regis College Humanities Course	Weston H. S.	a	NR	1	1972	bridge generation gap	Weston H. S.	
Boston College (Summer) Remedial Reading	Nazareth Child Care Center	f	NR	4	1970	provide practical experience for teachers	Boston College	
Special Program- Hale Reservation	Newton Community Center	f	NR	4	1971	"	both	
Harvard* PACE Program	U.S. Navy	g	NR	519	1960	introduce to college work	NR	
Tufts-Dental School Dental Programs-- Workshops	Mass. Div.-Heart Assoc.	g	NR	12	1972	deliver educational programs to dentists	NR	
	HEW	g	NR	60	1973			
	Society for Clinical & Experimental Hypnosis	g	NR	18	1972			
U Mass-Boston Prisoner Program	Mass. Dept. of Correction	g	NR	10	1973	to assist rehabilitation	NR	
Flexible Campuses	Boston Public Schools	x	NR	15	1971	expand offerings for Boston high schools	NR	
Institute for Learning and Teaching	Boston Public Schools other schools	g	NR	880	1970	NR	NR	
Mass. Bay C.C. Elder Affairs	Office of Elder Affairs Boston University Mass. Community College System	h	NR	--	planned 1973	develop a program in gerontology	Regional Board of Community Colleges	
Mt. Ida Junior College Data Processing Management	Data Utilities of North America	g	NR	--	1971	train data processors	both	
Northeastern Model Cities Higher Education Program	Model Cities	k	NR	NR	1972	faculty exchange	Model Cities	
AS in Dental Hygiene*	Forsyth School of Hygienists	b	NR	NR	NR	two-year degree program	NR	
AS in Aviation Technology*	Wiggins Airways, Inc.	b	NR	NR	NR	provide aviation training	NR	
Certificate in Radiologic Technology*	50 hospital schools of Radiologic Technology	b	NR	NR	NR	provide radiologic technology program	NR	

*Contract courses in cooperation with Cambridge Model Cities and Cambridge Economic Committee are detailed on branch campus chart.

*University College

*Lincoln College

BEST COPY AVAILABLE

F. Transfer Policies

DISCUSSION II-389

1. Descriptive Analysis. II-391
   - Credit for Experience II-392
     - Degree-Granting Institutions. II-392
     - Proprietary and Independent Institutions. . . . II-395
   - CLEP and Credit by Examination. II-396
     - Degree-Granting Institutions. II-396
     - Proprietary and Independent Institutions. . . . II-401
   - Accessibility of Regular Full-time Courses to Continuing Education Students. II-402
   - Problems Transferring to Other Institutions . . . II-405

2. Tables on Transfer Policies II-406
   - Table: For Students Transferring into Continuing Education
   - Table: For Students Transferring into Part-time Status in Regular Full-time Programs
   - Table: Transfer Policies, Who Sets Them?. II-413

DISCUSSION OF TRANSFER POLICIES

Throughout the state, mechanisms exist enabling students to receive credit for life experiences. Understandably, these options are more readily available to continuing education students than to part-time students in regular full-time programs. Middlesex Community College is one institution which has developed a formal procedure for obtaining credit for experience for continuing education students. Up to 30 credits are possible and the cost for application is $30. Most institutions willing to grant credit for experience have not as yet formalized their procedure and have not publicized the opportunity to the students.

Most colleges and universities in Massachusetts offer some method of credit by examination for matriculated undergraduate continuing education students and part-time students in full-time programs. Although some schools have designed "challenge" examinations of their own, most will accept CLEP scores in the upper 50th percentile for credit. Most do not require a fee for credit by examination, and generally, 20 to 60 credits are available. As with credit for experience mechanisms, there is not much publicity of opportunities for credit by examination.

Another issue is whether students enrolled in continuing education programs can take regular full-time courses for transfer credit, and if so, under what circumstances. School policies differ significantly on this. Some allow continuing education students to take courses in the regular full-time program for credit or noncredit, others for credit only or for noncredit only. Several will allow only matriculated continuing education students to take courses in the regular full-time program. Others require that the continuing education student follow formal admission procedures into the full-time program in order to take the courses. Still others will not allow a continuing education student to take courses in the regular full-time program at all. There is no general pattern of accessibility of continuing education students to regular full-time courses.

A student transferring into continuing education may have formerly been a full-time student or a part-time student in the regular full-time program in the same institution, or he may have been at another institution either as a full-time, part-time, or continuing education student. Likewise, a person becoming a part-time student in a regular full-time program may be leaving his full-time status at the same institution or transferring out of that school's continuing education program, or he may be transferring from another institution as a former full-time, part-time, or continuing education student.

In general, a student may transfer from full-time status to continuing education or part-time status within the same institution if he has passing grades. Some institutions such as Boston College will only accept "C" grades or better and some such as Springfield

Technical have a ten-year time limit. A few such as Babson and Clark enforce a credit limit.

The policies are more strict for a student transferring from one institution to another, whether or not there are changes in his status. A "C" grade is usually required, with certain exceptions like the Northeastern graduate schools which require a "B." Time limits on acceptance usually range from 6 to 10 years although Assumption College, for example, has no time limit. There is much variation in number of credits accepted in transfer--anywhere from "no limit if courses are consistent" to as few as 12 credits.

II.F.1. Descriptive Analysis

The following is a factual discussion of transfer policies in the colleges and universities of Massachusetts based on the information received in Data Formats. There were instances where institutions did not respond to questions and therefore, their policies are not included in the discussion. The topics to be considered here are Credit for Experience; CLEP and Credit by Examination; The Accessibility of Regular Full-time Courses to Continuing Education Students; Problems in Transferring to Other Institutions; what the Transfer Policies are and who sets the Transfer Policies. The subjects are discussed by region, by degree granting capacity of the school (two-year or four-year), and by public or private.

Credit for Experience

Mechanisms exist for students to receive credit for life experiences. These programs are more readily available to continuing education students than they are to part-time students in regular full-time programs. The following institutions indicated that they presently do give credit for experience or have plans to offer it in the future.

Degree-Granting Institutions

Western Region

Public Institutions

At North Adams State College, continuing education students may submit a written request to the graduate or undergraduate committee. A maximum of three semester hours credit may be obtained on the graduate level. At Westfield State College, continuing education students may get three to six semester hours credit for administrative internships in the M.Ed. School Administration program. Some other departments allow one to three or one to six credits for independent study.

The University of Massachusetts at Amherst has a program called OUTREACH by which continuing education students can work on a voluntary basis in social agencies such as hospitals, day care centers, nursery schools, correctional programs, companion counseling programs, etc. for credit. Continuing education students may apply for full time internship programs in a city, state or federal program for a semester and obtain up to fifteen credits for this experience. Also, modular credit for learning experiences is available through the school of education. Springfield Technical Community College offers credit for experience to continuing education students participating in fire science programs at Westover Air Force Base. Credit for experience is available in continuing education at Holyoke Community College for off-campus study. It is possible to earn twelve to fifteen credits. Part-time students at Holyoke may receive from six to twelve semester hours of credit for field experience for directed practice. Police officers can get credit for life experience at Greenfield Community College in continuing education. Continuing education students at Berkshire Community College may occasionally have course descriptions written to accomodate their particular needs.

Private Institutions

At Springfield College Evening Division, students are offered the possibility of credit for experience. A student may write up a proposal and then a judgment will be made. Most likely, this credit would come in the form of a waiver of certain course requirements. American International College presently grants credit for experience to full-time students and plans to offer it to part-time students.

Central Region

Public Institutions

Beginning in January, 1973, continuing education students at Framingham State may participate in an external degree program featuring a B.A. in Liberal Studies. Via this program students can receive credit for life experiences, independent study-travel, military experience, etc. up to a maximum of 104 credits (the maximum would be exceptional). At Fitchburg State College, continuing education students in the M.Ed. programs may receive credit for action research projects and internships with community agencies for a maximum of six credits. At Mount Wachusett Community College, continuing education students may receive up to four credits for field experiences.

Private Institutions

At Anna Maria College for Women, in continuing education, the equivalent of two years of college credit is given to R.N.'s. Continuing Education students at Assumption College can receive up to forty-eight credits for hospital training programs. In continuing education at Clark University, there is a special business seminar in which credits can be earned for special projects which are supervised by employers and approved by faculty. There are plans to expand this into the social science area.

Northeast Region

Public Institutions

At Middlesex Community College, continuing education students can receive credit for experience. The Committee on Advanced Standing allows up to thirty credits for life experience. Application is made to the Committee with a fee of $30. If the Committee concludes that a validating exam is necessary, a further fee of $15 is charged. At Salem State College, credit for experience is available through the Open College pilot program.

At Lowell Technological Institute, Evening School students have their external learning experiences evaluated by departmental examination if they offer to the department head sufficient hard data equivalent to a unit or more of credit (three semester hours). Practical experience off-campus and armed forces experience can be grouped to satisfy laboratory requirements if a student can furnish sufficient evidence to the Student Status Committee to qualify for credit. When negotiating credits, the student and the evaluation start with the premise that a student should not be required to pursue a semester of study in an area in which he has competence. No maximums of credit for experience have been established.

At North Shore Community College, the Department of Human Services and the Division of Continuing Education acknowledge external learning experiences and work cooperatively to help students receive it. The maximum available could reach the sixty credits required for the A.A. degree. Credit for experience is in the planning stages at Northern Essex Community College.

Private Institutions

At Merrimack College, it is possible for an Evening School student to obtain some credit for experience in engineering if he works for six months to a year and his supervisor verifies his experience.

Southeast Region

Public Institutions

Cape Cod Community College is presently developing a curriculum for credit for experience and Bristol Community College is also making plans for external learning.

None of the private institutions in the Southeast Region which responded mention mechanisms for obtaining credit for external learning experiences.

Boston Region

Public Institutions

Boston State College presently has no formal structure for credit for external learning for continuing education students. However, the graduate division is moving to grant credit for study-travel experience where relevant. The University of Massachusetts in Boston will allow part-time students credit for experience in certain social services courses.

Private Institutions

Curry College has a three-year-old continuing education program which has credit for experience as one of its goals. The procedure will be for a student to write up a request for credit which will be evaluated. Probably one to thirty credits will be available. Curry College does give credit for experience in its day program; for example, to a student taking a course at the Orson Wells Film School and to a student working in a school for the deaf. At Tufts, the Jackson College continuing education division is setting up a procedure by which a student will be able to petition to a faculty committee for credit for external experience.

In the Babson graduate program, students may be given credit for external work. Assessment is made by division heads. The Boston College Graduate School of Arts and Sciences grants credit for internships in the Department of Education. These off-campus credits are limited to one course or three units.

Proprietary and Independent Institutions

Several of the proprietary and independent institutions responded with data on their credit for experience policies. The Honeywell Institute of Information Sciences allows students with previous computer training to apply for advanced standing. At the Hickox School, experience in business may exempt a student from a secretarial procedures course. The ITT Technical Institute evaluates the past education and work experience of a student so that he does not waste time in an area where he already has knowledge and experience. At the Career Training Institute, courses can be tailored to an individual's background to avoid duplication of his effort and skill. Data on other proprietaries which provide such options was not available.

CLEP and Credit by Examination

Most of the colleges and universities in Massachusetts offer some method of credit by examination for matriculated undergraduate continuing education students and part-time students in full-time programs. Although some schools have designed "challenge" exams of their own, most will accept CLEP scores in the upper 50th percentile for credit. Some require a fee for credit by examination but most do not. Generally, 20 to 60 credits are available through examination.

Degree-Granting Institutions

Western Region

Public Institutions

Two Year Colleges

At Springfield Technical Community College, credit by special assessment or CLEP exam is available to continuing education students up to thirty credits. The cost is $7.50 per exam. The same applies for part-time students in full-time programs. At Holyoke Community College, CLEP credit is granted to part-time students in full-time programs up to thirty semester hours. A policy is currently being developed for continuing education students. Greenfield Community College is also in the process of setting a policy for credit by examination both for part-time and continuing education students. Continuing education students at Berkshire Community College may receive credit for the CLEP exam or by passing a course final exam with a "B" or better.

Four Year Colleges

Continuing education students at North Adams State College may receive up to sixty hours credit for the CLEP exam. Part-time students may receive up to ninety credits for the CLEP exam. In fact, all entering freshmen at North Adams State take the area CLEP exam and receive credit with a score of 50% or better. In fall 1972, 50% of all freshmen received at least three credits through the CLEP exam.

At Westfield State College, continuing education students may be granted up to ninety semester hour credits for the CLEP exam. No students have applied as yet. In continuing education at the University of Massachusetts at Amherst, up to thirty credits may be earned either with the CLEP exam or with the University-designed credit by exam. CLEP credits do not count toward prematriculation requirements, for part-time students at U./Mass-Amherst, up to thirty credits by CLEP exam may be granted, and with the approval of the Dean and the department head, up to fifty credits are possible for a University-designed exam.

Private Institutions

Two Year Colleges

Bay Path Junior College is the only two-year private college in the region. It has no part-time or continuing education students presently.

Four Year Colleges

At Springfield College, Evening Division students are given individual consideration for credit by exam. It is usually possible to obtain up to thirty-two hours for the CLEP exam for continuing education students. It is expected that they will be able to receive up to ninety semester hours credit for the CLEP exam at no fee. Part-time students at Western New England College may receive around thirty credits by CLEP and other standardized national exams. The subject matter must be applicable to the student's curriculum. There is no fee.

At American International College both continuing education and part-time students may receive up to sixty semester hours credit for the CLEP exam.

Central Region

Public Institutions

Two Year Colleges

At Quinsigamond Community College, up to thirty-two credits can be awarded for the CLEP or institutional exam to continuing education students. The cost is $2.33 per credit as opposed to the course fee of $21 per credit. Credit by exam can be used for ten courses or one-half the degree requirement. For part-time students at Quinsigamond Community College, up to thirty-two credits are also available for the CLEP exam but at a lower cost than in continuing education--$1.28 per credit as opposed to $16 per course credit. At Mt. Wachusett Community College up to thirty credits may be obtained for the CLEP exam at no cost.

Four Year Colleges

At Fitchburg State, vocational education students in continuing education may receive credit for the CLEP exam at no charge. Credits for CLEP and transfer combined cannot exceed 50% of credits required for a degree. Framingham State College does not grant credit for CLEP tests to continuing education students and grants it on a limited basis to part-time students (mostly to service personnel). In the Extended Learning Program at Worcester State College, only full-time matriculated students are eligible for CLEP credit.

Private Institutions

Two Year Colleges

None of the two-year private institutions in the Central Region responded to our questions on credit by examination.

Four Year Colleges

Anna Maria College for Women will allow continuing education students a maximum of sixty credits for the CLEP exam at no cost; it will allow up to thirty credits for part-time students. Worcester Polytechnic Institute will grant credit for the CLEP exam to continuing education students.

Continuing Education students at Assumption College may receive up to thirty-six credits for the CLEP exam at no cost. Part-time students in full-time programs may also receive CLEP credit; there is no set maximum. Clark University will grant up to thirty credits for the CLEP exam to continuing education students.

Northeast Region

Public Institutions

Two Year Colleges

At Middlesex Community Colleges, continuing education students may receive up to thirty credits for the CLEP exam. North Shore Community College will grant up to forty-five credits for the CLEP exam, and for its own "Credit-by-Exam " at a cost of $17 per credit (same as tuition). North Shore will also accept challenge exam results from fully accredited institutions of higher learning. Northern Essex Community College has just instituted a policy of credit for the CLEP exam for continuing education students. The only stipulation is that twenty-four credits must be earned through courses; the rest may be earned by exam.

Four Year Colleges

Salem State College is in the process of formulating policies for granting credit for the CLEP exam. Lowell Technological Institute offers continuing education students credit for the CLEP exam as well as special assessment by departmental exam. The student must score in the 50th percentile on the CLEP exam and no maximum of acceptable credits has been established.

Private Institutions

Two Year Colleges

Endicott Junior College has no procedures for granting part-time students credit for exam. No one has applied for it.

Four Year Colleges

At Merrimack, credit for the CLEP exam is not encouraged for continuing education students. It could possibly be given if a student needed an open elective.

Southeast Region

Public Institutions

Two Year Colleges

Cape Cod Community College will accept up to thirty semester hours credit for the CLEP exam at no cost. Scores from the U.S.A.F.I. (United States Air Force Institute) are also acceptable. This applies to both continuing education students and to part-time students in regular full-time courses. Bristol Community College also allows up to thirty hours credit for the CLEP exam. However, no one has used it.

Four Year Colleges

Bridgewater State will grant up to thirty credits to continuing education students who have successfully taken the CLEP exam at no charge.

Private Institution

Two Year Colleges

Dean Junior College has accepted up to thirty credits for CLEP exams for students enrolled in the Center for Continued Learning. Credit for CLEP tests is not available to part-time students in regular full-time courses at Dean Junior College; however, they will accept the U.S.A.F.I. exam.

Four Year Colleges

At Stonehill College, it is possible for Evening Division students to obtain the equivalent of one year's advanced standing credit through the CLEP exam. Wheaton College will not give credit for the CLEP or any other external exam.

Boston Region

Public Institutions

Two Year Colleges

Massachusetts Bay Community College will accept up to 24 hours of credit for the CLEP exam in continuing education and it is one of the few institutions in the state which has the same charge for credit by examination and course enrollment. However, no students have applied for CLEP credit.

Four Year Colleges

Boston State College does recognize CLEP credit for continuing education students and will accept up to sixty credit hours. The only fee paid is the CLEP fee. There is no record of the number of students receiving credit by examination.

The University of Massachusetts will accept CLEP credit for part-time students if they attain a score in the 50th percentile. Credit by university exam is available in disciplines such as languages. There is no fee for credit by examination and the maximum number of credits earned in this manner is 79.

Private Institutions

Two Year Colleges

Mt. Ida Junior College is willing to give part-time credit for the CLEP exam. Specific procedures have not been worked out but a minimum of thirty credits must be earned at Mt. Ida. To date no part-time students have acquired credit by examination. Part-time students at Garland Junior College may earn a maximum of 24 semester hours of credit by the CLEP exam. No students have applied for this.

Four Year Colleges

Suffolk University will grant up to sixty semester hours credit for the CLEP exam to continuing education students at no charge. Twelve to fifteen students enter each term with CLEP credit and a similar number take the tests and receive credit after admission. To date the maximum number of credits awarded for the CLEP exam is forty-five. At Boston University's Metropolitan College a student can receive up to sixty-four semester hours credit for CLEP tests with scores of "C" equivalent or better. At the Boston College Evening School a student can get up to sixty credits for the CLEP exam and since 1970, only two students have taken advantage of the opportunity.

Regis College will accept CLEP exams for credit but to date no one has requested it. There would be a fee charged. At Northeastern University it is possible to receive credit for the CLEP exam; at Lincoln College one can take a proficiency exam to measure previous training and experience in cases where normal transfer criteria cannot be met.

Wellesley College does not accept credit for the CLEP exam. However, as many as two units (eight hours) may be earned for the work of a course done independently by passing an exam with a "C" or better. The fee for the exam is $50 as opposed to the course fee of $325 per unit.

In the Boston Region, the following private four year schools have stated that they do not have a method by which continuing education and part-time students can obtain credit by examination: Tufts University, Harvard College, Bentley College, Boston College School of Management, Wheelock College, and Emmanuel College.

Proprietary and Independent Institutions

Several of the proprietary and independent institutions give credit for the CLEP exam. Among them are the Bay State Junior College of Business, the New England Educational Center, Newbury Junior College, and Burdett. The New England School of Pediatts has never used CLEP but would probably consider a request.

Some proprietary and independent institutions have developed other procedures for credit by exam. For example, the Opticians School of Framingham is instituting testing procedures; at the Hickox School, students may take an exam which can exempt them from courses; a student can receive full credit at the East Coast Aero-Technical School if he can pass the closing exams for a subject; and the Control Data Institute administers advanced standing tests to those who have had previous exposure to any of their program.

Accessibility of Regular Full-time Courses to Continuing Education Students

Consider now the option of whether students enrolled in continuing education programs could take regular full-time courses, and if so, under what circumstances. The completeness of data varied so that comparison of all aspects is not possible. Thus, the following is a statement of the information provided.

Western Region

Public Institutions

North Adams State College, Westfield State College and the University of Massachusetts at Amherst allow continuing education students to take regular full-time courses at the continuing education fee if seats are available. This can be done for credit or noncredit and applies to matriculated and nonmatriculated. At Holyoke Community College and Berkshire Community College, continuing education students may take a regular full-time course if the course is not offered in continuing education. At Greenfield Community College, a student must apply and be accepted into the day division in order to take its courses.

Private Institutions

At Springfield College, Evening Division students may take regular full-time courses by special arrangement on a seats-available basis if they have fulfilled course prerequisites. At Western New England, registration in regular full-time courses is allowed for continuing education students if there is a personal or scheduling problem. The student must fill the course prerequisites and have the permission of the Dean of the College and the Dean of the Evening Division. American International matriculated and nonmatriculated continuing education students may take any regular full-time course offered at the same cost.

Central Region

Public Institutions

At Worcester State and Framingham State continuing education students may not take regular full-time courses. Fitchburg State, Quinsigamond Community College and Mt. Wachusett Community College allow this type of registration if students pay the regular full-time rates.

Private Institutions

All of the private institutions in the Central Region responding to our inquiry about accessibility of continuing education students to regular full-time courses do allow this. Anna Maria College for Women, Worcester Polytechnic Institute, and Assumption College charge the regular full-time rate per course; Clark allows them to pay the evening college rate. Anna

Maria College and Clark offer this privilege to students who wish to take the courses for credit, and Clark's students must be matriculated students who have completed twelve to fifteen credits in continuing education before they can take regular full-time courses. At Assumption, both matriculated and non-matriculated continuing education students may take regular full-time courses for credit or non-credit if they attain passing grades.

Northeast Region

Public Institutions

Of the public institutions in the Northeast Region responding to our question on accessibility, Middlesex does not permit continuing education students to take regular full-time courses. At Lowell Tech., the only evening school students enrolled in day programs are graduate students. Both Salem State and North Shore Community College permit continuing education students to register in regular full-time courses on a seats—available basis for credit. This applies to matriculated and nonmatriculated students.

Private Institutions

Merrimack, the only private institution in the Northeast Region which has a continuing education program, allows Evening Division students to take regular full-time courses if they pay full-time fees.

Southeast Region

Public Institutions

Of the three public colleges in the Southeast Region who responding to the question on the accessibility of continuing education students to full-time day courses, all allow this type of registration. Cape Cod Community College stresses that continuing education students may take day courses under "exceptional circumstances" and that they must pay on a per credit hour basis as established by the day school business office. Both Bridgewater State and Bristol Community College allow matriculated students to take regular full-time courses on a seats-available basis.

Private Institutions

Dean Junior College allows continuing education students to take regular full-time courses if they register through the admissions office and pay separate fees. At Dean a student may be part-time in both the day and evening programs at the same time. Stonehill allows no interchangeability between regular full-time day and evening programs.

Boston Region

Public Institutions

At Both Boston State and Massachusetts Bay Community College, continuing education students may take regular full-time courses on a seats-available basis for credit only. This holds true for both matriculated and nonmatriculated students. At Boston State the cost is the same as for a continuing education course; at Massachusetts Bay Community College it is at a special prorated day cost.

Private Institutions

At Tufts in the College of Special Studies teacher preparation program, students may take courses for credit in the regular full-time program if the prerequisites have been met. Students enrolled in the Jackson College Continuing Education program do not take courses in the full-time program. The University Extension of Harvard University will admit degree candidates of good standing as Special Students to take one or more courses in the regular full-time program. They must pay the usual Harvard tuition charge and take the courses for credit. At Wheelock, continuing education students may take day courses if they pay full tuition ($75 per credit) and students at the Boston College Evening School may take courses in the full-time program on a space available basis at the cost of $260 to $400 per course. This applies to both matriculated and nonmatriculated students. At Bentley, the continuing education student may take regular full-time courses if he can meet the criteria for acceptance into that program. Regis College allows its continuing education students to take full-time courses for credit or noncredit at the cost of $60 per credit hour. If a continuing education student at Hebrew College can show a knowledge of Hebrew, she or he may take courses in the full-time day program and must pay the regular fees.

Simmons continuing education students have a unique status in that they are individuals who, for some reason, would not normally be admitted to the Simmons full-time program. Instead they are accepted with a continuing education status. After completing 24 hours of course work, they may apply for matriculation. Even after matriculation, they are referred to as continuing education students but their status is that of a regular Simmons student. The number of courses taken varies according to the individual and may even be a full-time load. So, the courses the Simmons continuing education student takes are the same as those taken by the full-time or part-time Simmons student.

At Curry College, many of the students taking continuing education courses are also full-time students. However, people who are only enrolled in continuing education do not take full-time day courses.

Problems Transferring to Other Institutions

In our inquiry, we asked about the nature and source of obstacles which part-time and continuing education students encounter in transferring credit elsewhere. Only ten of the institutions responded to our inquiry, saying that their part-time or continuing education students have had problems transferring credit elsewhere. The rest said that there have been no problems "to our knowledge."

The University of Massachusetts at Amherst says that twice its continuing education students had trouble transferring credits to Smith College. However, once the continuing education credit was confirmed, there was no problem. Simmons College students have occasionally been hindered in their attempts to transfer because of the "honors-pass-fail" grading system. This is particularly difficult at state institutions such as the University of Connecticut and the University of Rhode Island. There has not been a problem with the University of Massachusetts.

The Babson graduate programs said that its students have encountered problems with a few schools such as Michigan State which only accepts credit from A.A.C.S.B. schools.

Harvard Extension students have encountered difficulty at certain schools which give no credit for extension courses (Harvard is one). Some continuing education students at Cape Cod Community College have found that its courses in Child Psychology and Adolescent Psychology are not acceptable to the Board of Teacher Certification. There have also been some problems of certification of librarians.

A few Merrimack Evening Division students have had problems transferring credit to schools such as Babson which will not give credit for religion and philosophy. Some Salem State and Worcester State graduate students have had problems transferring out of state because Salem State is not listed under N.C.A.T.E. North Shore Community College had some problem having A.S. and A.A. programs recognized in toto but feel that within five years there will be little or no difficulty. Continuing education students at Northern Essex Community College have had minor problems transferring anatomy and physiology to nursing programs. This is due to the number of minutes in class.

BEST COPY AVAILABLE

TRANSFER POLICIES
For Students Transferring into Continuing Education
WESTERN REGION

KEY

FT= Full-time
PT= Part-time
CE= Continuing Education

SCHOOL	(a) FT - same institution	(b) PT in FT programs-same institution	(c) FT - diff. institution	(d) PT in FT programs-diff. institution	(e) CE - diff. institution
Public - Two Year					
Springfield Tech.	courses consistent individual consideration, 10 yr.	same as (a)	same as (a)	same as (a)	same as (a)
Holyoke C.C.	no limitation	no limitation	courses consistent "c", 30 cr., 10 yr	same as (c)	same as (c)
Greenfield C.C.	n/a	n/a	n/a	n/a	n/a
Berkshire C.C.	no limitation	no limitation	"c", accredited	same as (c)	same as (c)
Private - Two Year					
Bay Path J.C.	n/a	n/a	n/a	n/a	n/a
Public - Four Year					
North Adams State	good standing, 5 yr	same as (a)	"c", 5 yrs.	same as (c)	same as (c)
Westfield State	"d", 10 yrs.	same as (a)	exempted from cum. req. if from Mass. State Coll or J.C. otherwise, 1.5 after 30 cr., 1.75 after 60 cr., 2.0 after 90	same as (c)	same as (c)
U.Mass.	no limitation	no limitation	"c", 75 cr.	same as (c)	same as (c)
Private - Four Year					
Springfield Coll.	no limitation	n/a	individual consideration, no time limit	same as (c)	same as (c)
Western New Eng.	no limitation	no limitation	"c", 90 cr.	same as (c)	same as (c)
American Internat'l	no time limit	same as (a)	same as (a)	same as (a)	same as (a)

For Students Transferring to Part-time in Full-time Programs

Public - Two Year					
Holyoke C.C.	no limitation	no limitation	courses consistent "C", 30 cr, 10 yr.	same as (c)	same as (c)
Springfield Tech C.C.	no limitation	no limitation	"C", 30 cr., 10 yr	same as (c)	same (c)
Private - Two Year					
none					
Public - Four Year					
U/Mass.	no limitation	no limitation	"C", A.A. - blanket of 60 cr.	same as (c)	same as (c)
North Adams State	no limitation	no limitation	"C"	"C"	"C"
Private - Four Year					
Western New England	no limitation	no limitation	"C", no time limit	same as (c)	same as (c)
American Internatl.	no limitation	same as (a)	same as (a)	same as (a)	same as (a)

BEST COPY AVAILABLE

TRANSFER POLICIES
For Students Transferring into Continuing Education

CENTRAL REGION

KEY

FT= Full-time
PT= Part-time
CE= Continuing Education

SCHOOL	(a) FT - same institution	(b) FT in FT programs- same institution	(c) FT - diff. institution	(d) FT in FT programs- diff. institution	(e) CE - diff. institution
Public - Two Year					
Quinsigamond C.C.	no limitation	no limitation	"C", courses consistent	same as (c)	same as (c)
Mt. Wachusett C.C.	no limitation	no limitation	"C", courses consistent, 45 cr. 10 yrs.	same as (c)	same as (c)
Private - Two Year					
Leicester Jr. Col.	n/a	n/a	n/a	n/a	n/a
Public - Four Year					
Worcester State	good standing	n/a	good standing applicable credits	same as (c)	same as (c)
Framingham State	approval of Dept. chairman	same as (a)	max. 6 cr. for grad. approval of Dept. chairman	same as (c)	same as (c)
Fitchburg State	no limitation	no limitation	n/r	n/r	n/r
Private - Four Year					
Anna Maria College	n/a	n/a	n/a	n/a	n/a
W.P.I.	n/a	n/a	n/a	n/a	n/a
Assumption	passing grades no time limit	same as (a)	"C-", 72 cr. no time limit	same as (c)	same as (c)
Clark	"C" (some "D"s accepted), 105 cr. no time limit	same as (a)	"C"--90 cr. (60 Jr. Coll.) no time limit	same as (c)	same as (c)

For Students Transferring to Part-time Status in Full-time Programs

SCHOOL	(a) PT - same institution	(b) CE - same institution	(c) PT - diff. institution	(d) PT in FT programs- diff. institution	(e) CE - diff. institution
Public - Two Year					
Quinsigamond C.C.	"C", no time limit	same as (a)	same as (a)	same as (a)	same as (a)
Private - Two Year					
Leicester Jr. Coll.	no limitation	n/a	"C", 30 cr.	same as (c)	same as (c)
Public - Four Year					
Worcester State (Extended Learning Prog.)	upon matriculation	n/a	"D" from State College, "C" from other	same as (c)	same as (c)
Framingham State	individual consideration	same as (a)	same as (a)	same as (a)	same as (a)
Private - Four Year					
W.P.I.	n/a	n/a	n/a	n/a	n/a
Holy Cross	n/a	n/a	n/a	n/a	n/a
Clark	no limitation	no limitation	liberal arts courses	same as (c)	same as (c)
Assumption	passing grades no time limit	same as (a)	liberal arts "C"	same as (c)	same as (c)
Anna Maria College	no limitation	n/a	"C", 60 cr. no time limit	same as (c)	same as (c)

BEST COPY AVAILABLE

TRANSFER POLICIES
For Students transferring into Continuing Education
NORTHEAST REGION

KEY

FT= Full-time
PT= Part-time
CE= Continuing Education

SCHOOL	(a) FT - same institution	(b) PT in FT programs- same institution	(c) FT - diff. institution	(d) PT in FT programs- diff. institution	(e) CE - diff. institution
Public - Two Year Middlesex C.C.	all accepted	all accepted	"C"	"C"	"C"
North Shore C.C.	no limitation	no limitation	courses consistent	same as (c)	same as (c)
Northern Essex C.C.	no limitation	no limitation	"C" - meet degree requirements	same as (c)	same as (c)
Private - Two Year none					
Public - Four Year Salem State	undergrad. - no time limit grad. - 6 yrs., 6 cr.	same as (a)	same as (a)	same as (a)	same as (a)
Lowell Tech. (Eve. Div.)	passing grades	n/a	"C" - accredited	same as (c)	courses consistent "C" - accredited
Private - Four Year Merrimack Coll.	with approval	n/a	AA - 24 cr. BA - 44 cr.	same as (c)	same as (c)

For Students Transferring to Part-time Status in Full-time Programs

SCHOOL	(a) FT - same institution	(b) CE - same institution	(c) FT - diff. institution	(d) PT in FT programs- diff. institution	(e) CE - diff. institution
Public - Two Year none					
Private - Two Year Endicott Jr. Coll.	no limitation	n/a	must fulfill 1 yr. residence requirement before graduation	same as (c)	individual consideration
Public - Four Year Lowell State	no limitation	n/a	undergrad. - 60 cr. grad. - 6 cr. 5 yrs.	same as (c)	examined more closely
Private - Four Year none					

BEST COPY AVAILABLE

TRANSFER POLICIES
For Students Transferring into Continuing Education

SOUTHEAST REGION

KEY

PT= Full-time
PT= Part-time
CE= Continuing Education

SCHOOL	(a) FT - same institution	(b) PT in FT programs-same institution	(c) FT - diff. institution	(d) PT in FT programs-diff. institution	(e) CE - diff. institution
Public - Two Year Cape Cod C.C.	no limitation	no limitation	30 s.h., 10 years	same as (c)	same as (c)
Massasoit C.C.	n/r	n/r	n/r	n/r	n/r
Bristol C.C.	full transfer if courses suit--no time limit	same as (a)	same as (a)	same as (a)	same as (a)
Private - Two Year Dean Jr. College	no limitation	same as (a)	30 cr., "C" courses consistent 7 yrs.	same as (c)	same as (c)
Public - Four Year S.M.U.	n/r	n/r	n/r	n/r	n/r
Bridgewater State	no limitation if courses consistent	same as (a)	same as (a)	same as (a)	same as (a)
Private-Four Year Stonehill Coll. (CE)	n/a	n/a	n/a	n/a	n/a
Stonehill Coll. (Eve. Div.)	full credit	n/a	60 cr.	same as (a)	no

For Students Transferring to Part-time Status in Full-time Programs

SCHOOL	(a) FT - same institution	(b) CE - same institution	(c) FT - diff. institution	(d) PT in FT programs-diff. institution	(e) CE - diff. institution
Public - Two Year Cape Cod C.C.	10 yrs.	10 yrs.	10 yrs.	10 yrs.	10 yrs.
Private - Two Year Dean Jr. College	no time limit	same as (a)	same as (a)	same as (a)	same as (a)
Public - Four Year S.M.U. (Grad. Div.)	n/a	n/a	"C", 6 yrs. 1/5 degree req.	same as (c)	same as (c)
Mass. Maritime Academy	n/r	n/r	n/r	n/r	n/r
Private - Four Year Wheaton College	full credit	n/a	courses consistent	same as (c)	same as (c)

BEST COPY AVAILABLE

TRANSFER POLICIES
For Students Transferring into Continuing Education

BOSTON REGION

KEY

FT= Full-time
PT= Part-time
CE= Continuing Education

SCHOOL	(a) FT - same institution	(b) PT in FT programs-same institution	(c) FT - diff. institution	(d) PT in FT programs-diff. institution	(e) CE - diff. institution
Public - Two Year Mass. Bay C.C.	upon request of student	n/a	petition Dir. of Eve. Div. like courses w/ same content, up to 24 hrs	same as (c)	same as (c)
Private - Two Year Pine Manor	n/r	n/r	n/r	n/r	n/r
Public - Four Year Boston State	grad.--no longer a day program	same as (a)	6 cr. w/ permission of grad. council (sometimes up to 12 cr.)	same as (c)	same as (c)
	undergrad. - all credits	same as (a)	up to 90 s.h.	same as (c)	same as (c)
Private - Four Year Suffolk	8 yrs. for undergrad., 5 yrs. for grad.	same as (a)	same as (a)	same as (a)	same as (a)
Simmons	n/a	n/a	depends on course content	same as (c)	n/a
Lesley	n/r	n/r	n/r	n/r	n/r
Curry College	n/a	n/a	n/a	n/a	n/a
B.U. Metro. Coll.	2.0 cum.	same as (a)	2.0 cum., accredited college	same as (c)	same as (c)
Tufts	"C-"	n/a	upon recommendation of academic dept. chairmen	same as (c)	indiv. evaluation
Harvard	courses passed	n/a	"C", no duplication of courses	same as (c)	same as (c)
Wheelock	n/r	n/r	n/r	n/r	n/r
Boston College Evening School	"C", 10 yrs.	same as (a)	same as (a)	same as (a)	same as (a)
Wen[illegible]rth Inst.	n/a	n/a	n/a	n/a	n/a
Bentley - Cont. Ed	special arrangement through Dean of College and approval by Dept. Chairman	same as (a)	same as (a)	same as (a)	same as (a)
Bentley - Eve. Div	n/r	n/r	n/r	n/r	n/r
Regis	all accepted no time limit	same as (a)	2.0 cum.	same as (c)	same as (c)
Hebrew College	n/a	n/a	n/a	n/a	n/a
Radcliffe Inst.	n/a	n/a	n/a	n/a	n/a
Babson (Graduate Prog.)	30 cr. "B"	same as (a)	same as (a)	same as (a)	same as (a)
Northeastern Lincoln Coll.	n/a	n/a	"C", reasonable time	same as (c)	same as (c)
University Coll.	n/a	n/a	"C"	same as (c)	same as (c)

BEST COPY AVAILABLE

TRANSFER POLICIES
For Students Transferring to Part-time Status in Full-time Programs

BOSTON REGION

KEY

FT= Full-time
PT= Part-time
CE= Continuing Education

SCHOOL	(a) FT - same institution	(b) CE - same institution	(c) FT - diff. institution	(d) FT in FT programs- diff. institution	(e) CE - diff. institution
Public - Two Year none					
Private - Two Year Mt. Ida Jr. Coll.	n/r	n/r	30 cr., 2.0 cum.	same as (c)	same as (c)
Grahm Jr. Coll.	n/r	n/r	n/r	n/r	n/r
Garland Jr. Coll.	automatic acceptance	n/a	"C", no time limit, from accred. inst.	same as (c)	same as (c)
Public - Four Year U/Mass.	all, no time limit	n/a	courses evaluated	same as (c)	courses evaluated and accredited institution
Private - Four Year Tufts	n/a	n/a	n/a	n/a	n/a
Boston College School of Mgt.	generally accepted	n/a	per other institution	same as (c)	same as (c)
Boston College Grad. School of Arts & Sciences	12 cr., "B"	same as (a)	6 cr., "B"	same as (c)	same as (c)
Wellesley College	all accepted no time limit	n/a	accredited, same curriculum content	same as (c)	same as (c)
Wheelock College	5 yrs.	n/a	5 yrs., (M.S.Ed. 6 [illegible].)	same as (c)	same as (c)
Emmanuel College	evaluation by Acad. Dean & Assist. Acad Dean	n/a	same as (a)	same as (a)	same as (a)
Brandeis University	n/r	n/r	n/r	n/r	n/r
Northeastern Grad. Sch. of Ed.	n/a	n/a	12 q.h., "B", 7 yr	same as (c)	same as (c)
Grad. Sch. of B.A.	n/a	n/a	15 q.h., "B", 7 yr	same as (c)	same as (c)
Grad. Sch. of L.A.	n/a	n/a	12 q.h., "B", 7 yr	same as (c)	same as (c)
Grad. Sch. of Eng.	n/a	n/a	12 q.h., "B", 7 yr	same as (c)	same as (c)

Transfer Policies, Who Sets Them? (Tables)

The tables in this section are intended to illustrate comparatively which bodies or committees are responsible for setting transfer policies. These are not necessarily the same groups responsible for admitting transfer students. The tables also show when the present policies were last revised and when the next revision is planned. As with the preceeding set of tables the letters "n/r" mean that there was no response to our question, and "n/a" means that the question is not applicable to that particular program.

BEST COPY AVAILABLE

TRANSFER POLICIES
WESTERN REGION

(Continuing Education)

SCHOOL	Body Setting Transfer Policies	Last Revision	Next Revision
Public - 2 yr Springfield T.	College Registrar and Dir. of Admissions	n/r	n/r
Holyoke C.C.	Academic Standards Committee reports to Faculty Senate	revised annually	revised annually
Greenfield C.C.	Academic Standards Committee	n/r	n/r
Berkshire C.C.	Continuing Education Advisory Committee	n/r	n/r
Private - 2 yr Bay Path J.C.	n/a	n/a	n/a
Public - 4 yr North Adams St.	Director of Admissions who reports to Academic Dean and President	n/r	no plans
Westfield State	Admissions Committee which reports to President	n/r	constant review
U/Mass.	Continuing Education sets policies with approval from Faculty Senate, and Committee on Continuing Education	n/r	no plans
Private - 4 yr Springfield C.	Registrar's Office and Academic Dean	n/r	n/r
Western N.E.	Dean of Evening Division with the approval of Academic V.P. and President	not for awhile	no plans
American Intern.	Committee of Deans and Registrar reporting to President	10/15/71	no plans

(Part-time Students in Full-time Programs)

SCHOOL	Body Setting Transfer Policies	Last Revision	Next Revision
Public - 2 yr Holyoke C.C.	Academic Standards Committee-reporting to Faculty Senate and Pres.	reviewed annually	reviewed annually
Springfield Te.	Registrar and Department Chairmen	Fall '72	no plans
Greenfield C.C.	Faculty-Student Committee on Academic Standards reporting to Faculty and President	n/r	n/r
Private - 2 yr none			
Public - 4 yr U/Mass	Board of Admissions and Records reporting to Faculty Senate	n/r	n/r
North Adams St.	Academic Policies and Standards Committee	n/r	being revised
Private - 4 yr Western N.E.	Academic Deans reporting to Academic V.P.	within last 2 yrs.	no plans
American Intern.	Trustees and Faculty	June '72	n/r

TRANSFER POLICIES
CENTRAL REGION

BEST COPY AVAILABLE

(Continuing Education)

SCHOOL	Body Setting Transfer Policies	Last Revision	Next Revision
Public - 2 yr Quinsigamond	Sub-Committee of the Council of Continuing Education (Director of Admissions, Registrar, Assistant to President, Dean of College Reports to full Council of Continuing Education	n/r	Spring '73
Mt. Wachusett	Director of Continuing Education, Division Chairman and Dean of Faculty	n/r	n/r
Public - 2 yr Leicester J.C.	n/a	n/a	n/a
Public - 4 yr Worcester State	Director of Continuing Education or Associate Director	n/r	n/r
Framingham St.	Grad. - Graduate Committee reporting to President via V.P. Undergrad. - College Curriculum Committee reporting to Pres. via V.P.	n/r	n/r
Fitchburg State	Grad. - Graduate Committee, reporting to director Undergrad. - Vocational Educational Curriculim Committee, report to President and Director	n/r	n/r
Private - 4 yr Anna Maria Coll.	no transfer policies, would be members of bio. and chem. depts., Dean of College	n/r	n/r
W.P.I.	Director of Continuing Education in connection with faculty	n/r	n/r
Assumption	Evening College Council (Director, Dean, Associate Dean, Registrar, Chairmen of Divisions and Depts.)	n/r	n/r
Clark	Evening College Board (6 faculty & students appointed by Provost). advise Director who reports to Provost.	n/r	n/r

BEST COPY AVAILABLE

TRANSFER POLICIES
CENTRAL REGION

(Part-time Students in Full-time Programs)

SCHOOL	Body Setting Transfer Policies	Last Revision	Next Revision
Public - 2 yr Quinsigamond	Admissions Committee and Dean's Council recommend to the Faculty Concourse, reports to President	n/r	no plans
Private - 2 yr Leicester	n/r	n/r	n/r
Public - 4 yr Worcester State	n/a	n/a	n/a
Framingham St.	Board of Trustees of State College	n/a	being reviewed
Private- 4 yr W.P.I.	no specific body charged with this	n/r	n/r
Holy Cross	n/a	n/a	n/a
Clark	(students admitted as full time)	n/a	n/a
Assumption	Academic Council	September '72	constantly reviewed
Anna Maria	n/r	n/r	n/r

BEST COPY AVAILABLE

TRANSFER POLICIES
NORTHEAST REGION

(Continuing Education)

SCHOOL	Body Setting Transfer Policies	Last Revision	Next Revision
Public - 2 yr Middlesex CC	Advanced Standing Committee	recent	n/r
North Shore CC	Registrar, Director of Admissions, Department Head, and Division Chairman with Dean of Students, Director of Continuing Education and Community Services	n/r	n/r
Northern Essex	Dean of Students, Director of Admissions, Director of Continuing Education, Division and Department Chairmen.	last year	n/r
Private - 2 yr none			
Public - 4 yr Salem State	Standing Committees within Faculty Senate	n/r	n/r
Lowell Tech (Eve. Div)	Student Status Committee. Student initiates request, coordinator recommends, committee votes.	n/r	Policies are changed as needs develop
Private - 4 yr Merrimack	Evening Division - independent of rest of college	n/r	n/r

(Part-time Students in Full-time Programs)

SCHOOL	Body Setting Transfer Policies	Last Revision	Next Revision
Public - 2 yr none			
Private - 2 yr. Endicott J.C.	Academic Policy Committee - reports to president and trustees	n/r	n/r
Public - 4 yr Lowell State	Graduate Advisory Council	1970	no plans
Private - 4 yr none			

TRANSFER POLICIES
SOUTHEAST REGION

BEST COPY AVAILABLE

(Continuing Education)

SCHOOL	Body Setting Transfer Policies	Last Revision	Next Revision
Public - 2 yr Cape Cod C.C.	Dean of Continuing Education reporting to Executive Dean reporting to President	n/r	n/r
Massasoit C.C.	n/r	n/r	n/r
Bristol C.C.	Executive Council reports to President	n/r	n/r
Private - 2 yr Dean J.C.	Faculty committees, Academic Dean, and President	1971-72	no plans
Public - 4 yr SMU	n/r	n/r	n/r
Bridgewater St.	Board of Trustees	1971 - 72	n/r
Private - 4 yr Stonehill (CE)	n/a	n/a	n/a
Stonehill (Eve)	Academic Committee and Dean's Office	n/r	n/r

(Part-time Students in Full-time Programs)

SCHOOL	Body Setting Transfer Policies	Last Revision	Next Revision
Public - 2 yr Cape Cod C.C.	Registrar and Academic Dean	1967	under study
Private - 2 yr Dean J.C.	Faculty Committee advises Full Faculty which reports to President	n/r	n/r
Public - 4 yr SMU	Graduate Council (Dean of Grad. School, faculty rep. from dept., 2 non-voting students) - reports to President through Dean	1971	no plans
Mass. Maritime	n/r	n/r	n/r
Private - 4 yr Wheaton	Admissions Board in conjunction with Associate Dean, both report to Dean of College	at present	at present

TRANSFER POLICIES
BOSTON REGION

BEST COPY AVAILABLE

(Continuing Education)

SCHOOL	Body Setting Transfer Policies	Last Revision	Next Revision
Public - 2 year			
Mass. Bay CC	Dean of Faculty & Division Chairman (report to President)	n/r	constantly reviewed and updated
Public - 4 year			
Boston State	Grad. - Dean of Grad. Studies & Grad. Council (report to Pres. & Dean of College) Undergrad. - Dean of Special Programs as advised by Evaluation Committee (reports to Pres. & Dean of College)	Fall '72	Spring '73
Private - 2 year			
Pine Manor	n/r	n/r	n/r
Private - 4 year			
Suffolk	Admissions Policy Committee (reports to Faculty Assembly through Educational Policy Committee)	reviewed annually	reviewed annually
Simmons	Committee on Admissions	n/r	n/r
Lesley	n/r	n/r	n/r
Curry	n/r	n/r	n/r
B.U. - Metropolitan College	Metropolitan College Faculty Board	n/r	n/r
Tufts	College of Special Studies - certain faculty and Dean (report to Provost) Jackson - faculty	n/r	no current plans for change
Harvard	Director's Office with the Administrative Board of the University Extension	n/r	under constant scrutiny
Wheelock	n/r	n/r	n/r
Boston College (Eve. School)	Admissions Office	n/r	under constant scrutiny
Wentworth	n/r	n/r	n/r
Bentley (C.E.)	n/a	n/a	n/a
Bentley (Eve. Div.)	n/r	n/r	n/r
Regis College	Academic Dean and Director of Continuing Education	1971	no changes planned
Hebrew College	n/a	n/a	n/a
Radcliffe	n/a	n/a	n/a
Babson (Grad. Program)	Academic Affairs Committee of Academic Deans	n/r	n/r
Northeastern University Coll and Lincoln C.	Admission Committee on Academic Standing	n/r	n/r

BEST COPY AVAILABLE

TRANSFER POLICIES
BOSTON REGION

(Part-time Students in Full-time Programs)

SCHOOL	Body Setting Transfer Policies	Last Revision	Next Revision
Public - 2 year none			
Private - 2 year Mt. Ida J.C.	College Council (students, faculty and administrative personnel) - reports to President	n/r	no plans
Garland J.C.	Curriculum Committee (division & dept. chairmen) - acts upon recommendations of Dean of Faculty	Spring '72	no plans
Grahm J.C.	n/r	n/r	n/r
Public - 4 year U/Mass.	University Assembly approves policies presented by University Academic Affairs Committee	2 years ago	at present under study
Tufts	n/a	n/a	n/a
Boston College (School of Management)	Director of Graduate Program and Dean	4 years ago	no plans
Boston College (Grad. Sch. of Arts & Sci)	Education Policy Committee (representatives of department, students & faculty) - reports to Dean of Students	n/r	no plans
Wellesley	Academic Council, individual decisions made by Dir. of C.E., Dean of College & Recorder	n/r	no plans
Wheelock	Graduate Study Committee (undergrad. n/r)	June, 1972	no plans
Emmanuel	Assistant Academic Dean reporting to Academic Dean reporting to President	1971-1972	no plans
Brandeis	n/r	n/r	n/r

BEST COPY AVAILABLE

G. Outreach, Admissions, Guidance

DISCUSSION. II-423
Admissions II-423
Guidance II-423
Outreach II-424
The Education Periphery. II-425

1. Descriptive Analysis of Outreach, Admissions and Guidance II-426
Degree-Granting Institutions II-426
The Education Periphery Institutions II-432
Limitations of Data on Outreach Programs II-433

2. Tables on Outreach, Admissions and Guidance. II-433
Table: Inventory of Continuing Education and Part-time Study Outreach Programs for Women, Elderly and Disadvantaged Clienteles II-434
Table: Selected Characteristics of Outreach Programs II-437
Table: Admissions Requirements for Continuing Education Programs II-447

DISCUSSION OF OUTREACH, ADMISSIONS AND GUIDANCE

Outreach, admissions, and guidance policies are important determinants of the extent to which a school "reaches out" to serve its community. The nature of academic offerings sets limits on clientele reached. But an institution's admissions policies, its attempts beyond offering more courses and programs to attract students, and the services it provides to aid the student pursuing his or her studies are also significant measures of its community role. The purpose of this section is to examine how part-time and continuing postsecondary institutions in Massachusetts define that role in terms of outreach, admissions, and guidance.

Admissions

Admissions policies with regard to nonmatriculated students (those not formally enrolled in a degree program) are fairly standard: all who apply are allowed to take courses, so long as they have paid all required fees. This open admissions policy for class attendance (whether in credit or noncredit courses) is restricted at a few schools to courses which have space available after regular students have been admitted. In almost every case, formal application procedures are not required. Thus access to courses is not determined by individual admissions decisions of continuing education administrators. Poor academic background is no hindrance to participation. This is in marked contrast to full-time programs, where a case may be made that certain groups are denied access by virtue of strict admissions standards.

In general there are no limitations on student access from space or faculty requirements either. Continuing education programs are self-supporting; if enough students are willing to pay, the program will be offered.

The limitations to access must then be price and attitudes of certain groups that they either cannot attend or would not benefit from education if they did attend. The middle class character of students noted in Section III.A. is not determined by admissions procedures but by participation rates of various groups. Outreach and guidance thus become particularly important in bringing in new clientele groups.

Policies vary when students seek to matriculate in a degree program. Some form of previous academic credential (usually a high school diploma or the equivalent) and the attainment of a minimum of successfully completed credit course work are often required. Part-time students applying for acceptance as matriculated candidates in full-time programs are subject to the same admissions standards as full-time students.

Guidance

Primary attention in this area has been paid to academic advising. Degree candidates structuring programs which best serve their purpose are usually advised by a member of either the faculty or staff of the institution. In some schools, only the dean or director of continuing education provides these services. Nonmatriculated students are often excluded from this counseling system, unless they specifically request aid. At a minimum, most schools have an advisor present during registration. For part-time students in full-time programs, almost no special counseling--academic or otherwise--is provided. Regular counseling facilities are generally open to use by part-time students, buty they are often not equipped to meet the special needs and problems presented by part-time students.

Although some form of academic counseling is available to most part-time and continuing education students, almost no provision is made for personal and vocational guidance. Limited resources and funding places severe constraints on the provision of these services, particularly at public continuing education programs. Some schools have stretched these resources to provide more complete academic and personal guidance services. Middlesex Community College operates a center staffed by student-volunteers; Tufts and Pine Manor arrange peer group guidance support sessions for their continuing education students. Women at U./Mass-Amherst operate the Everywoman's Center, which provides outreach and guidance services. Professional counselors are provided by some schools, such as North Shore Community College and Boston College Evening School, during hours when classes are in session. One of the few full-time counselors in continuing education is available at the Massasoit Community College. Two of the state's largest continuing education programs--Northeastern and Boston Universities--also provide the most extensive counseling services. Special programs for part-time students at Worcester and Framingham State Colleges have built-in a counseling and advising component to deal specifically with their needs.

Outreach

Almost every continuing education program tries to tailor its offerings to perceived community needs. Although few undertake formal need surveys, most schools maintain informal contacts with business, industries, community and civic organizations for input into program planning. Schools often react to requests for programs from governmental agencies or local organizations, especially when funding or an assurance of adequate enrollment is given.

The few part-time-in-full-time programs have less flexibility in this regard, since the primary attention of these institutions is devoted to full-time students. But some special programs, particularly those with outside funding, are instituted by these schools.

In much the same way, branch campuses and satellite operations are utilized as a common method of reaching beyond institutional confines to unserved clienteles. These range in size from one course offered to a specific organization to large operations like Northeastern's suburban campus in Burlington, which offers a wide range of credit courses.

Special academic and personal interest programs are often established to attract community members into the educational processes of a college or university. Highly practical, short-term noncredit courses (like auto mechanics and organic gardening) and special degree programs like Framingham's external degree are indicative of this type of outreach. Both tend to remove barriers, either physical or psychological, that often deter participation in continuing education.

Recruitment efforts, through public relations, word-of-mouth, and personal contact with employer and community groups, are a common form of outreach. While some of these approaches, such as newspaper advertising, are not aimed at any specific groups, others are designed to recruit from specifically targeted populations. In general, few full-time programs attempt to recruit part-time students, except for those schools which have special part-time programs.

While the range of these efforts is broad, their number is limited by severe constraints of financing and staff. Without outside funding, many schools would not be able to provide significant outreach services.

The Education Periphery

The peripheral segment of postsecondary education in Massachusetts--proprietary and independent institutions and adult education centers--has a different perspective on the issue of outreach. For those schools designed to provide specialized job training preparatory to employment, the programs themselves are outreach efforts. Offerings are geared to associated business and industry needs, and vocational counseling and job placement comprise important components of these programs. Similarly, the adult education program, with its wide variety of courses to meet community needs and interests, is itself an outreach program of the local school system.

Admissions requirements for these schools vary, but restrictions beyond age and presentation of a high school diploma are rare.

II.G.1. Descriptive Analysis of Outreach, Admissions and Guidance

To group these three aspects of part-time and continuing education may seem at first to be unwarranted. Each has clearly distinct elements which must be treated separately. But the interacting effect of outreach, admissions, and guidance policies is an important factor in the dynamic that determines the nature and function of the institution. The extent to which a school is "reaching out" into its community is greatly determined by the nature of its academic offerings. But an institution's admissions policies, its attempts beyond more course and program offerings to attract students, and the services it provides to aid the student pursuing his or her studies are also significant measures of its community role.

The purpose of this section is to examine how part-time and continuing postsecondary institutions in Massachusetts define that role in terms of outreach, admissions, and guidance. Specific policies in each of these areas will be compared, and unusual programs will be highlighted. The topics will be considered first on a statewide basis, including a discussion of aspects of outreach and guidance programs in each part of tho state. The overall context of this section, however, views each of the three components as part of an interrelated system in which "outreach," in its broadest sense, might be used as the category in which these various elements might be placed.

Degree-Granting Institutions

Admissions

Almost without exception, admissions policies with regard to non-matriculated students (those not formally enrolled in a degree program) do not vary: all who apply are allowed to take courses, so long as they have paid all required fees. This open admissions policy for class attendance (whether in credit or noncredit courses) is restricted at some schools to courses which have space available after regular students have been admitted.

Some programs, particularly those allowing part-time students to take courses in the full-time programs, are slightly more restrictive regarding space availability or the meeting of course prerequisites. In almost every case, however, formal application procedures are not required.

Variations occur when students seek enrollment in a degree program. Some form of previous academic credentials (usually a high school diploma or the equivalent) and the attainment of a minimum of successfully completed credit course work are often required. Part-time students applying for acceptance as matriculated candidates in full-time programs are subject to the same admissions standards as full-time students. This usually entails presentation of a formal application with supporting credentials (diploma, transcripts, test scores, etc.). A table detailing these variations for institutions in Massachusetts appears at the end of this chapter,

Guidance

Primary attention in this area has been paid to academic advising. The needs of degree candidates to structure programs which best serve their purpose are usually handled by an advisor from either the faculty or staff of the institution. These people are only secondarily counselors; their primary function at the institution involves teaching or administrating. In some schools, only the dean or director provides these services.

Nonmatriculated students often are excluded from this advisory system, unless they specifically request aid. At the least, most schools have an advisor present during registration to advise these students.

For part-time students in full-time programs, almost no special counseling--academic or otherwise--is provided. Regular facilities are, of course, open to use by part-time students. But these offices often are not equipped to meet the special needs and problems presented by part-time students.

Although facilities for academic counseling, though limited, are available to most part-time and continuing education students, almost no provision is made for personal and vocational guidance. Such services are almost always handled by the academic advisors who, though qualified to discuss programs and related problems, often lack the experience and time to deal with the complex difficulties that continued schooling often entails. Some directors express their own misgivings about assuming such a role, but realize that they are often the only individual at the institution who can. The low tuition charged and hence limited funds available for services in public continuing education programs places severe constraints on expenditures for supporting services such as counseling. Most institutions devote their attention and resources primarily to serve full-time students, with notable exception stated below.

The effect of this limitation on counseling resources is especially acute for these students. But adults who return to school, as most of these people are, experience different obstacles than regular students. Since their major life activity is not being a student, they have to deal with academic problems against a backdrop of more complex personal situations. Family problems, prior negative educational experiences, uncertainty about goals are more likely to plague part-time and continuing education students. Peer support and advice, which are readily available for resident full-time students is just not accessible to part-time students unless special efforts are made.

Recognizing the importance of counseling to the successful education of their students, some continuing education and part-time programs have stretched their resources to provide academic and personal guidance services. Two of the largest continuing education programs--Boston University and Northeastern--provide extensive counseling services. Boston University's three counselors conducted 5000 interviews last year, not including advisement during resitration period. One counselor also visited a prison to offer information on Boston University's educational opportunities. Northeastern has program advisors in its Boston and branch campuses, as well as counseling by appointment. Many other private institutions similarly expend tuition resources for services (see charts).

Middlesex Community College operates a center staffed by student-volunteers who receive credit for assisting in guidance efforts. Pine Manor Junior College arranges evening meetings for its women continuing education students that provides "support therapy" in a peer group setting. Such peer group guidance support, along with individualized counseling, is available to students in Tufts University's continuing education program for women. Women students at U./Mass.-Amherst operate the Everywoman's Center, which provides outreach and guidance services.

Such devices as group guidance sessions help spread thin resources among greater numbers of students. Some continuing education programs go beyond such efforts and utilize professional counselors, at least on a part-time basis. Two academic advisors, and personal and vocation counselors are available all year at North Shore Community College. Boston College Evening School provides a professional counselor available to students during evenings when classes meet.

One of the few full-time counselors in continuing education is available at Massasoit Community College. During afternoon and evening hours, she arranges group meetings for guidance, provides one-to-one counseling for individuals and families, and visits community groups to advise them of continuing education opportunities at Massasoit.

Special programs for part-time students at Worcester and Framingham State Colleges have built-in a counseling and advisement component to deal specifically with these concerns. The external degree at Framingham, initiated this year, includes an advisory committee of four faculty and an administrator for every participant. A lengthy, individualized counseling and assessment session is required as part of the program. The new Extended Learning Program at Worcester State, specifically designed for part-time students, conducts personal interviews to advise students prior to registration, and is planning supportive and follow-up services for participants.

Beyond these responses, some efforts have been made to provide specific clientele groups with appropriate guidance services. These people have been identified as facing special problems in continuing their education: women who have family responsibilities or have been sheltered by their social role from opportunities for educational advancement; elderly who find themselves beyond the "normal" age for education but feel the need for productive activity as their leisure time increases; and disadvantaged persons who have generally been excluded from the mainstream of society and its educational opportunities. Some efforts to provide these people with counseling and guidance support have been undertaken at several institutions. Tables at the end of this chapter document some of these programs. (The problem of these special clientele groups is generally discussed elsewhere in the report.)

Outreach

An academic institution is generally thought of as an inward-looking place: students apply and are granted admissions. Although the language is indicative of internal focus, the reality of higher education should be a two-way process. The community enters the educational world and the school reaches out into the community. The outreach efforts of any institution take many forms and cut across all of its functions. The nature of its academic programs, admissions standards, supportive services, financial aid all determine the extent to which a school draws upon its surrounding community, be it local or national. More obvious kinds of outreach efforts are also undertaken by schools: publicity of programs, recruitment of students, contacts with local organizations, branch campuses, and special community-oriented programs.

Some could interpret outreach as one of the overriding aims of an academic institution, perhaps even its raison d'être. Such a conception is beyond the scope of this chapter. Instead, the patterns of efforts in Massachusetts specifically aimed at drawing the outside community into a school's continuing and part-time educational processes will be examined. Attention has been given to special target groups (women, elderly, and disadvantaged) in this regard (see chapter on special clientele groups and tables at the conclusion of this chapter). For various financial, social, and personal reasons, these groups require special efforts to incorporate them into the educational system. But in part-time and continuing education, we are dealing with a potential clientele that is often not predisposed toward re-entry into an educational system that they had previously left, often with ill feelings. To draw in these people, as well as those special clientele groups, institutions often must utilize various outreach devices. The general pattern of these activities in Massachusetts will be discussed here.

Almost every institution tries to tailor its program offerings to perceived community needs. Although few undertake formal need surveys, most schools maintain informal contacts with businesses, industries, community and civic organizations for input into program planning. Some survey students at periodic intervals to determine what new programs are in demand. Enrollment trends are another factor by which schools evaluate community desire for certain courses of study. Advisory committees at many institutions oversee each program; some of these bodies include noncollege people from the community.

Some schools react to requests for programs from governmental agencies and local organizations. When funding, or an assurance of adequate enrollment is given, these proposals are usually implemented. Public institutions are generally more receptive to these requests, but private schools view such input as potential sources of demand that could be profitably tapped.

The few part-time-in-full-time programs have less flexibility in this regard, since the primary attention of these institutions is devoted to full-time students. But some special programs, especially those that are funded by outside agencies, are instituted by these schools.

In much the same way, branch campus and satellite operations are developed. This is a common method of reaching beyond institutional confines to unserved clienteles. These branches range in size from one course offered to a specific organization to large operations like Northeastern's suburban campus in Burlington, which grants numerous degrees and offers a wide range of credit courses. Such branch operations are treated in more detail in Section II.D.

Special academic and personal interest programs are often established to engage the community into the educational processes of a college or unversity. These range from highly practical, short-term noncredit courses (like auto mechanics and organic gardening) to special degree programs like Framingham State's external degree, which grants credit for experience and nontraditional modes of learning. Both types of programs attempt to pierce the barrier that any academic institution imposes between itself and the public; the workshops draw first-time students into the habit of taking courses, while external degree programs circumvent barriers of time and space which prevent some from engaging in postsecondary education.

Other special offerings--ranging from noncredit conferences and workshops (like Project SELF for women at U./Mass.-Amherst) to specialized degree programs (like the Extended Learning Program at Worcester State) seek to draw out specially targeted clientele groups. These efforts often take advantage of available grants from Federal, State and local governments. The Federal Work Incentive Program (WIN) funds many skill training programs for the disadvantaged. Funds have also been available under Title I of the Higher Education Act and Model Cities programs, eliminating or reducing course fees in many cases.

Outreach often takes the form of direct student service. Counseling, guidance, and admissions policies have already been discussed. Tuition reduction is another form of service, though in many cases it is initiated by an employer or a government agency, through such means as teacher vouchers, veterans benefits, and Law Enforcement Education Program (LEEP) assistance. Direct outside funding reduces or eliminates tuition costs in most cases, as we have seen. A few institutions reduce fees for special groups, such as the elderly or local residents. Other schools absorb losses on noncredit, special interest courses offered at a nominal tuition to attract new students. In general, however, direct student financial aid is unavailable. Most institutional priorities for such assistance lie with full-time students. Some

BEST COPY AVAILABLE

special scholarships are available, but these are rare. Other services are also provided. Several schools operate day care centers where mothers can leave their children while taking courses. Special transportation facilities, like the shuttle bus operated between Worcester Consortium schools, are another such service.

Promotion of programs through public relations methods is another way to reach unserved clientele. Practically all schools print a bulletin of courses that is mailed on request, but many engage in other promotional activities. Publication of newspaper advertisements with a listing of courses several weeks before registration is common practice. Some of these efforts generate multiple page advertising supplements, which are produced by schools ranging in size from Berkshire Community College to Northeastern University. Schools in the Worcester Consortium print a combined advertisement listing courses at six member institutions.

Mailings, either to the general population or to selected audiences for specific courses, are frequently utilized. Some radio and television spots are used, but most institutions do not have large enough promotion budgets to do so to any great degree; the cost-effectiveness of such ads is doubted by many administrators. Other mass media techniques, such as the press release, are used to announce new programs and courses.

Some schools seek to recruit students through personal contacts at businesses and community agencies. In fact, these organizations often provide a form of cooperative referral through the counseling function of the institution. Counselors in such cases make frequent visits into the community to gain a sense of both community needs and the availability of further services for students. In turn, the agency or organization becomes familiarized with opportunities at the college to which it can refer its members.

Most institutions find that word-of-mouth contact by students is the most effective method of publicity. A few schools have conducted surveys of promotion effectiveness which reveal that a majority of new students are made aware of continuing education and part-time study opportunities by friends who are already enrolled as students. Current students are valuable outreach resources, offer a readily available channel of access to the community.

As is generally true regarding outreach, few full-time programs attempt to recruit part-time students or promote part-time study. Those schools which have special part-time programs, however, do devote attention to the need for outreach activities.

Despite this wide range of outreach efforts that is apparent statewide, several constraints hinder expanded efforts to reach clientele currently unserved by present part-time and continuing education programs. These people were described by one director as "alienated groups," whom he listed as the elderly, delinquents, poor, handicapped, Spanish-speaking, and blacks. Others pointed out that blue collar workers, Portugese immigrants, women with children at home, and others are not being reached by their programs. For reaching some, such as women, the lack of services such as day care centers stand as barriers. But the primary constraint is money. Courses cost money, and someone must pay for them. Many of the unserved clientele are in those lower income groups that cannot afford most programs without direct financial assistance such as scholarships or vouchers. Services such as advising, counseling, and special facilities are also ruled out by financial constraints in many cases. Outreach is an attitude toward the community as well as a concrete activity. Many of the programs described in this chapter are examples of what can be accomplished, even with limited resources.

The Education Periphery

The noncore segment of postsecondary education in Massachusetts--proprietary and independent institutions and adult education centers--brings a different perspective to the issue of outreach. While a college or university serves a general educational function in the community, the so-called peripheral institutions play a specifically defined educational role. Proprietary schools in the business and technical schools are designed to provide specialized job training preparatory to employment. As one school director described it, these programs are the "missing link for well-educated people" who seek entry into specific jobs.

For these kinds of institutions, the programs themselves are the principle outreach efforts. The school's offerings are geared to meet the needs of its clientele in a specific area. Business and technical schools draw upon sources in industry for this demand information; its programs are structured to mesh with needs in the industry it serves, be it data processing, hairdressing, or accounting. Since the primary purpose of these schools is to train people for jobs, placement counseling is an important component of the program. Most of these vocationally-oriented programs stress the placement function which is maintained through contacts with the businesses into which these schools feed successful students.

These contacts work in both directions: industries that are seeking further training for their employees are a major source of students for proprietary and independent institutions. These recruitment efforts are supplemented by contacts with high school counselors, government agencies concerned with manpower training, newspaper advertising, and direct mail promotion.

Admissions requirements vary, but programs at proprietary and independent institutions are generally open to high school graduates. There are usually no further restrictions for matriculation into a certificate program, though professional standards in fields such as real estate and accounting sometimes apply to students. Some programs allow students without a high school diploma to enroll in a course without intending to complete the program. These cases are rare, and only a few such students are involved.

Adult education centers generally provide basic educational training and fulfill the wide-ranging avocation interests of the community. Admissions are quite unrestrictive; a few schools limit admissions by age or residency criteria. The entire adult education program is, in one sense, an outreach program of the local school system. The program offerings, which cover a wide variety of needs and interests, are designed to meet the demands of the community. Contacts are maintained with local groups and organizations to provide input into course planning; these centers express a high degree of responsiveness to local demands.

Since they are designed to serve a maximum number of people at any one time, adult education centers seem to prefer branch operations to outreach supporting services (like day care, counseling, etc.). In one sense, however, some courses provide guidance to participants by drawing them together into issue-focused discussions. Such an approach is taken by the Concord-Carlisle program, which sponsors courses in nursing homes, churches, and private homes as well as in public schools throughout the community. Its Women's Opportunity Workshop, operated jointly with Widening Horizons, Inc., provides the same kind of supporting services usually offered by counseling services. One of the few adult education programs that utilizes guidance counselors is Worcester's Adult Learning Center, which provides high school equivalency, basic education, and English as a second language courses.

The two examples cited here are indicative of the additional outreach services that few adult education centers provide. Nonetheless, these programs draw out people from the community through more traditional devices: providing a variety program of courses that meet the interests and needs of the clientele it serves.

Limitations of Data on Outreach Programs

In a number of instances, schools reported the information in a very general way such that specifics about their programs were not made explicit. This is true, further, in that some schools did not list specific programs at all but seemed to imply the existence of outreach programs. One possible reason for the sparsity of information, as in the Boston Region, is that schools did not think to single out the three designated clientele groups as special clienteles.

II.G.2. Tables on Outreach, Admissions and Guidance

--Inventory of Continuing Education and Part-time Study Outreach Programs for Women, Elderly and Disadvantaged Clienteles
--Selected Characteristics of Outreach Programs
--Admissions Requirements for Continuing Education Programs

BEST COPY AVAILABLE

II.G.2. INVENTORY OF CONTINUING EDUCATION AND PART-TIME STUDY OUTREACH PROGRAMS FOR WOMEN, ELDERLY, AND DISADVANTAGED CLIENTELES

WESTERN REGION

KEY
x = available in Fall 1972
p = planned

	WOMEN									ELDERLY								DISADVANTAGED												
	practical training	workshops	academic courses	special center	day care center	counseling	tuition assistance	recruitment/publicity	other	practical training	workshops	academic courses	counseling	tuition assistance	paraprofessional trng.	recruitment/publicity	other	skill courses	MDTA training	prison programs	bilingual programs	practical training	workshops	academic courses	special center	counseling	tuition assistance	paraprofessional trng.	recruitment/publicity	other
Greenfield C.C. CE	x		x		x						x			x				x				x							x	
Greenfield C.C. p-t																														
Holyoke C.C. CE	x							x			p											x	x					x	x	
Holyoke C.C. p-t												p				p						x						x	p	
Berkshire C.C. CE												x										x					x			
Springfield Tech. C.C.CE					x																	x		x						
Springfield Tech. C.C.p-t																					p	p		x		p				
Westfield State CE																														
No. Adams State CE																														
No. Adams State p-t																														
U. Mass. Amherst CE		x	x	x	x	x	x	x	x		x							x					x					x	x	
U. Mass. Amherst p-t																														
Bay Path J.C. CE			p																											
American International CE																														
American Internationalp-t																														
Springfield College CE																														
Western New England CE																														
Western New England p-t																														

CENTRAL REGION

Mt. Wachusett C.C. CE					p																	x								
Quinsigamond C.C. CE																		x			x	x	x	x		x			x	
Quinsigamond C.C. p-t																														
Fitchburg State CE																														
Framingham State CE																				x		x								
Framingham State p-t																														
Worcester State CE																						x		x				x		
Worcester State p-t																														
Worcester Consortium																					x	x								
Leicester Jr. Coll. CE											x																			
Leicester Jr. Coll. p-t																														
Assumption College CE																														
Assumption College p-t			x																				x	x						
Anna Maria College CE																								x				x		
Anna Maria College p-t																														
Worcester Poly. CE																														
Worcester Poly. p-t																														
Holy Cross p-t																														
Clark CE		x																					x							

BEST COPY AVAILABLE

INVENTORY OF CONTINUING EDUCATION AND PART-TIME STUDY OUTREACH PROGRAMS FOR WOMEN, ELDERLY, AND DISADVANTAGED CLIENTELES

NORTHEAST REGION

KEY
x = available in Fall 1972
p = planned

	WOMEN									ELDERLY								DISADVANTAGED												
	practical training	workshops	academic courses	special center	day care center	counseling	tuition assistance	recruitment/publicity	other	practical training	workshops	academic courses	counseling	tuition assistance	paraprofessional trng.	recruitment/publicity	other	WIN courses	EEA training	prison programs	bilingual programs	practical training	workshops	academic courses	special center	counseling	tuition assistance	paraprofessional trng.	recruitment/publicity	other
No. Essex C. C. CE					p														x						x		x			
No. Shore C. C. CE		x			p					p	x						p					x								
Middlesex C. C. CE			x			x			x		p											p						x		
Lowell State Coll. p-t																														
Lowell Tech. Inst. CE																														
Lowell Tech. Inst.-Pve.-CE																														
Salem State CE	x																					x								
Endicott Jr. Coll. CE																														
Endicott Jr. Coll. p-t																														
Merrimack Coll. CE																														

SOUTHEAST REGION

Bridgewater State CE	p																													
Bristol C. C. CE					p																x	x		x			x			
Bristol C. C. p-t																														
Cape Cod C. C. CE					p							x				x						p		x						
Cape Cod C. C. p-t																														
Mass. Maritime Acad. p-t																														
Massasoit C. C. CE			p		p							p									x	x		x		x				
Southeastern Mass. Univ. CE																														
SMU p-t																														
Dean Jr. College CE											x																			
Dean Jr. College p-t																														
Stonehill College p-t																														
Wheaton College p-t																														

BEST COPY AVAILABLE

INVENTORY OF CONTINUING EDUCATION AND PART-TIME STUDY OUTREACH PROGRAMS FOR WOMEN, ELDERLY AND DISADVANTAGED CLIENTELES

BOSTON REGION

KEY

x = available in Fall 1972

p = planned

	WOMEN									ELDERLY								DISADVANTAGED												
	practical training	workshops	academic courses	special center	day care center	counseling	tuition assistance	recruitment/publicity	other	practical training	workshops	academic courses	counseling	tuition assistance	paraprofessional trng.	recruitment/publicity	other	ABE courses	EEA training	prison programs	bilingual programs	practical training	workshops	academic courses	special center	counseling	tuition assistance	paraprofessional trng.	recruitment/publicity	other
Mass. Bay C.C. CE											p	p																		
Boston State CE																			x		x			x						
U./Mass.-Boston p-t																				p					p					
Bentley Jr. College CE																														
Garland Jr. College p-t					p																									
Grahm Jr. College p-t																														
Lesley Jr. College CE	x		x		p																							x		
Mt. Ida Jr. College p-t																														
Pine Manor Jr. Coll. CE		x	x				x																							
Babson College p-t																														
Boston Coll.-Summer School CE																						x		x						
Boston Coll.-Evening College CE												x																		
Boston Coll.-Sch. of Mngmnt. p-t																														
Emmanuel College p-t																														
Hebrew College CE																														
Radcliffe Inst. CE		x	x		p	x																								
Regis College CE																					x									
Simmons College p-t			x			x																								
Wellesley College p-t																														
Wentworth Inst. CE																														
Wheelock College CE			x															x				x		x		x				
Wheelock College p-t																						x								
B.U. Metro. Coll. CE			x															x				x		x		x				x
Brandeis Univ. p-t																								x						
Harvard Univ.-Univ. Ext. CE			x																											
Northeastern			x																											
Suffolk Univ. CE																														
Tufts Univ. CE		x	x		x	x	x																							

BEST COPY AVAILABLE

SELECTED CHARACTERISTICS OF OUTREACH PROGRAMS

WESTERN REGION

Women

INSTITUTION/PROGRAM	DESCRIPTION	# INVOLVED	CREDENTIAL	COST TO STUDENT	FUNDING	WHEN OFFERED
U./Mass.-Amherst CE						
1) Project SELF!	Offers topics not usually covered in regular university curriculum bringing women together	159	noncredit 1 credit to Univ. students	$15	CE	Fall, 1972, mornings or evenings
2) Everywomen's Center (incl. Proj. SELF!) #4	Offers workshops, support groups academic, personal, and vocational counseling	159	credit/ noncredit	$25	CE	Begun fall,1971
Holyoke C.C. CE						
1) Secretarial Studies	Training for entry; retraining for reentry; upgrading for advancement. Short term goals	54	credit/CEU	$18/credit	CE	Evenings
Greenfield C.C. CE						
1) WIN Program	General Education for WIN mothers; new skill training (typing)	51	noncredit	None	Fed. grant	Spring, 1972-
2) Evening Workshops	New Skill Training (interior decorating) and Recreation (cooking, crocheting) for homemakers	81	noncredit	$16/20/25	Fed. grant	Spring, 1972-
3) Evening Workshop	In self-improvement (enrichment)	14	noncredit	$10	NR	Fall, 1972
Bay Path Jr. Coll. CE						
1)Liberal Arts 2)Child Study 3)Mental Health Assoc.	For adult women-projected		A.A., A.S.			1973

Elderly

U./Mass.-Amherst CE						
1) Program for Nursing Home Administrators	Seminars on problem areas of administrators	15	credit or CEU	$65/course $325/6-course package	NR	Fall,1972
Holyoke C.C. p-t						
1) "Educare"	Projected-Education for older citizens					Sept. 1973
Greenfield C.C. CE						
1) Title I	SElf-Help Program on Aging	200	noncredit	none	Title	Spring,1972

Disadvantaged

U./Mass.-Amherst CE						
1) New Career Training	(Typing I) on-the-job training for use in paraprofessional positions for underemployed	10	credit/ noncredit	$75	Fed. Gov't Grant/2nd yr. U.Mass. split funding	Feb.1972-late afternoons
2) COP (Career Opportunities Program)	Degree in Edu. program for off-campus group that wouldn't ordinarily have it	301	noncredit	$5/credit hour	Fed. Gov't Grant (HEW Model Cities; Headstart; Titles I, IV, VI,VII)	1971
3) Hearing Aid Dealers Seminar	Special fittings, performance analysis, licensing, clinics	12	CEU	$160	NR	Spring,1972-afternoon
4) Nursing Program	Professional Educational Opportunities--personal professional improvement	15	noncredit	$86-119.00	CE/Dept. of Nursing	Starts spring, 1973

BEST COPY AVAILABLE

SELECTED CHARACTERISTICS OF OUTREACH PROGRAMS

WESTERN REGION

Disadvantaged, cont'd.

INSTITUTION/PROGRAM	DESCRIPTION	# INVOLVED	CREDENTIAL	COST TO STUDENT	FUNDING	WHEN OFFERED
Holyoke C.C. CE						
1) Community Service Aide	Training paraprofessionals for delivery of services to disadvantaged community	28	noncredit	Free	Title I	Oct. 1972- Jan. 1973 (afternoon)
2) Resource Center	Training adults in housing projects to operate their own resource centers	10	noncredit	Free	Title I	Sept. 1972- May 1973 (evenings)
3) Emergency Medical Technician	Projected (workshops)		credit/CEU		Western Mass. Health Planning Council	Feb. 1973
4) Continuing Ed. for R.N.'s	Projected		A.A.			Sept. 1973
5) Project Impact	Paraprofessional training for community service agencies	28	certificate	none	$14,080- Fed. grant	1972-
6) Title III Audio Tutorial	Train disadvantaged students	28	credit	regular tuition	$20,000- Fed. grant	1972-
Holyoke C.C. p-t						
1) Holyoke Hospital Nurses	Provide liberal studies to supplement hospital training	40	credit	$285	NR	Annually for 2 semesters
Greenfield C.C. CE						
1) WIN Program	Gen. Ed. and New Skill Training (Typing) for WIN mothers	51	noncredit	none	Fed. grant	Spring, 1972-
Springfield Tech. C.C. CE						
1) Bio-Medical Handicapped Program	Train Handicapped	20	CEU	none	Grant?	Sept. 1971- Dec. 1972
2) Core Nursing Program at Springfield Hospital	For Springfield Hosp. Student Nurses	120	credit	$60/course	NR	regular semester
Springfield Tech. C.C. p-t						
1) Student Development Program	To help students who need further academic assistance in basic college prep. skills (educationally disadvantaged; minority students)	250	credit	$16/credit not to exceed $125	NR	
2) Special Student Services	For disadvantaged population, counseling services, modular skill courses, ESL, Spanish for Spanish speakers	PROJECTED				July 1973
3) Physical-Occupational Therapy	" "					Sept. 1973
-2-way radio tech.	" "					"
-dental tech.	" "					"
-electronic bench-work tech.	" "	PROJECTED				"
-automobile estimator	" "					"
-electro-mechanical tech.	" "					"

BEST COPY AVAILABLE

SELECTED CHARACTERISTICS OF OUTREACH PROGRAMS

CENTRAL REGION

INSTITUTION/PROGRAM	DESCRIPTION	# INVOLVED	CREDENTIAL	COST TO STUDENT	FUNDING	WHEN OFFERED
Women						
Assumption Coll. p-t						
1) Abnormal Psychology	For disadvantaged mothers and professionals working together in Head Start Program	18	credit	None	Child Study (Fed. program)	Fall,1972
Elderly						
Leicester Jr. Coll. CE						
1) Seminar for Nursing Home Administrators	(short course) PROJECTED					March 1973
Disadvantaged						
Mt. Wachusett C.C. CE						
1) Social Casework	Projected		AS			Sept. 1975
Quinsigamond C.C. CE						
1) Contract Courses	Courses such as Early Childhood, Public Health, Group Dynamics, Principles of Social Work offered in cooperation with a variety of federally funded agencies (inc. Headstart, COP, Manpower Dev't Training Act and others). No more specific information.				$900-1200 (per course)	Since 1968
2) League of Women Voters Institute	A co-sponsored series of lectures attempting to upgrade the skills of indigenous counsellors in order to help the disadvantaged			------NR------		
3) English As a 2nd Language	Special package course for C.O.P.			------NR------		
4) S-ALL	Community services to upgrade and educate disadvantaged students					
Framingham State CE						
1) Medfield Norfolk Project	Training Program for Prisoners Training as Human Service Technicians	130	CEU	None	NR	Fall,1972 (4 courses, 2-1/2 hrs. each)

BEST COPY AVAILABLE

SELECTED CHARACTERISTICS OF OUTREACH PROGRAMS

CENTRAL REGION

Disadvantaged, cont'd.

INSTITUTION/PROGRAM	DESCRIPTION	# INVOLVED	CREDENTIAL	COST TO STUDENT	FUNDING	WHEN OFFERED
Worcester State CE						
1) Teams for Learning	Course-requested by COP and Title I Directors in Worcester-on interpersonal relationships to better understand role played by teachers, aides, and administrators in total educational program	70	credit	none	NR	Spring,1971
2) Training Workshop for Child Development	For Head Start personnel-to understand the role of each participant in the development of the program	24	credit	none	NR	Fall,1971
3) Child Psychology	Course on the growth of the child as it relates to learning requested by Head Start	24	credit	none	NR	Spring,1972 12:45-3:15 P.M.
4) Creative Arts for Young Children	Course on methods and materials for 4 and 5 yr. olds requested by Head Start	23	credit	none	NR	Fall,1972 1:00-3:15 P.M.
Worcester Consortium						
1) Hispanic Aid Project	Assistance of consortium schools to Worcester Public Schools in teaching functional Spanish to Worcester teachers		NO SPECIFIC INFORMATION			
Assumption Coll. p-t						
1) Abnormal Psychology	For disadvantaged mothers and professionals working together in Head Start program	18	credit	None	Child Study (Fed. program)	Fall,1972
2) 3-Day Workshop on Early Childhood Dev't.	For disadvantaged persons becoming teacher aides in disadvantaged schools in Worcester	12	noncredit	None		Dec. 1971
3) Conference	on "Cooperative Planning of Social and Rehabilitation Services for Disabled Public Assistance Recipients"	NR	noncredit	NR	HEW grant (Rehab. Services Administration)	Nov. 30-Dec.2, 1972
4) Conference	on "Occupational Information and Placement"	NR	noncredit	NR	HEW grant (Rehab. Services Administration)	May 9-10,1972
5) Conference	"Training Institute on the Rehabilitation of the Alcoholic"	NR	noncredit	NR	HEW grant (Rehab. Services Administration)	Aug.15-17, 1972
Anna Maria CE						
1) Health Studies	For R.N.'s desiring a specialty in anesthesia; offered jointly with hospital	52	credit (B.S.)	$1600 (full-time) $30/credit (part-time)		

BEST COPY AVAILABLE

SELECTED CHARACTERISTICS OF OUTREACH PROGRAMS

NORTHEAST REGION

Women

INSTITUTION/PROGRAM	DESCRIPTION	# INVOLVED	CREDENTIAL	COST TO STUDENT	FUNDING	WHEN OFFERED
Northern Essex C.C.-CE						
1) Administrative Secretarial Procedures	To increase knowledge & skills in educational office management sponsored by Merrimac Educ. Center & DCE & CS/NECC	12	credit	$60 plus $3 reg.	$800	Spring, 1972
No. Shore C.C. - CE						
1) Community Service Workshop	On "Women's Career Exploration and Planning Workshop"	43	noncredit	$30	CE	Spring, 1973 Weds. 7-9 p.m. 8 weeks
Middlesex C.C. - CE						
1) Social Work Assoc. Program	To train paraprofessionals to help social workers	25	credit C.E.U.	$726	CE	Days - 1 year
2) Women's Opportunity Research Centers	Guidance of women toward vocations	300	noncredit	[illegible]	NR	Continuous
3) Early Childhood Ed. Assistant	Paraprofessionals for nurseries, day care	60	credit	[illegible]	CE	Day & Evening
4) Secretarial Workshop	Upgrade secretarial performance	60	noncredit	$55	NR	
Salem State - CE						
1) Day Care Training Institute under HEW	Provide opportunity for mothers (primarily on welfare) to obtain professional trg. in area of child care.	108	credit	None	HEW	Reg. Acad. Yr.-Mornings

Elderly

No. Shore C.C. - CE						
1) Noncredit Program	Courses such as Personal Typing & Basic Speedwriting, Woodworking, A.V. Technique, Basic Office Proc., Income tax Prep., Lip Reading PROJECTED		noncredit	NR	NR	Spring, 1973
Middlesex C.C. - CE						
1) Elderly Affiars	PROJECTED		A.A./C.E.U.			Sept. 1974
2) Preretirement	PROJECTED		noncredit			Sept. 1975

BEST COPY AVAILABLE

SELECTED CHARACTERISTICS OF OUTREACH PROGRAMS

NORTHEAST REGION

Disadvantaged

INSTITUTION/PROGRAM	DESCRIPTION	# INVOLVED	CREDENTIAL	COST TO STUDENT	FUNDING	WHEN OFFERED
Northern Essex C.C.-CE						
1) Contract Courses	Given by NECC for participants in the Emergency Employment Act. Courses on Child Psych, Surveying, Intro to Lib. Serv., Adol. Psych, Conversational Spanish, Shorthand	114	credit (?)	0	EEA $1,000-$2,000	1972
Middlesex C.C. - CE						
1) New Careers, Lowell	Paraprofessional trg. for disadvantaged blacks & Puerto Ricans	30	credit/C.E.U.	None	Funding by agency contract	Days, M-F
2) Headstart, Lowell	" "	30	credit	None	Funding by agency contract	Days, M-F
3) Model Cities, Lowell	" "	50	credit	None	Funding by agency contract	Days, M-F
4) Action for Boston Community Development	" "	210	credit	None	Funding by agency contract	Days, M-F
5) Cambridge Headstart	" "	40	credit	None	Funding by agency contract	Days, M-F
6) Cambridge Community Learning Center	" "	30	credit	None	Funding by agency contract	Days, M-F
7) Hospital-Medical Program	Upgrading of professionals and paraprofessionals	80	credit	$20/credit	NR	Evenings
8) Youth Services	Guidance to school dropouts	10	noncredit	None		Daily, Continuous Summer

BEST COPY AVAILABLE

SELECTED CHARACTERISTICS OF OUTREACH PROGRAMS

SOUTHEAST REGION

Women

INSTITUTION/PROGRAM	DESCRIPTION	# INVOLVED	CREDENTIAL	COST TO STUDENT	FUNDING	WHEN OFFERED
Bridgewater State - CE						
1) Day Care Center Trg.	Professional training of day care personnel - PROJECTED					Fall,1975
Bristol C. C. - CE						
1) Bi-lingual Secretary Program	For disadvantaged-immigrant to develop typing & shorthand skills	25	noncredit	None	HR	Evenings
Massasoit C. C. - CE						
1) Child Care	Upgrade and develop more educational personnel - develop community awareness - PROJECTED		C.E.U.			Sept. 1973
Dean Jr. Coll. - CE						
1) Secretarial Workshop	PROJECTED		C.E.U.			Spring,1973

Elderly

Cape Cod C. C. - CE						
1) Community Service Course	On "Creative Retirement"	99	noncredit	$7	CE	Evenings
Massasoit C. C. - CE						
1) Community Service Program	PROJECTED		noncredit			Sept. 1973
Dean Jr. Coll. - CE						
1) Creative Retirement	Informational	105	C.E.U.	Free	HR	Fall,1971- 4 2-hr. sessions
2) Creative Retirement Workshop	Informational - in cooperation with Mass. Office of Elderly Affairs	51	C.E.U.	Free	CE	Fall,1972- 4 2-hr. sessions

BEST COPY AVAILABLE

SELECTED CHARACTERISTICS OF OUTREACH PROGRAMS

SOUTHEAST REGION

Disadvantaged

INSTITUTION/PROGRAM	DESCRIPTION	# INVOLVED	CREDENTIAL	COST TO STUDENT	FUNDING	WHEN OFFERED
Bristol C. C. - CE						
1) H. S. Diploma - GED	Aid students in attaining high school diploma	242	noncredit	$45.00	NR	Evenings-6 wks.
2) English as 2nd lang. (ESL)	For Portuguese immigrant	150	noncredit	$5.00	NR	Evenings-28 wks.
3) Bilingual Secretary Program	For disadvantaged-immigrant to develop secretarial skills	25	noncredit	None	NR	Evenings-1 year
Cape Cod C. C. - CE						
1) H. S. Diploma - GED	Aid students in attaining high school diploma	250	noncredit	$40-$60	CE	Evenings-10 wks.
Massasoit C. C. - CE,						
1) ESL	Teach ESL to Spanish & Portuguese	20	noncredit	None	Grant	Sept.-Jan.- Tues & Thurs- 6-9 p.m., Weds., 6-9 p.m.
2) H. S. Diploma - GED	Aid Students in attaining high school diploma	150	noncredit	None	Grant	Sept.-Jan.- Tues/Thurs 6-9
3) New Careers	Fill needs of new agencies	25	credit	None	Grant	Sept-June, M-F, 1-4 p.m.
4) Human Resources Social Service/Opt.	Social Welfare Assistants	20	credit	None	Grant	Sept-June, 6-9 p.m.
5) Self-development for low income students	Increase education awareness of students for educ. & job preparedness	25-32	noncredit	None	Grant	Sept.-May, Mon-Thurs, 1-4 p.m.
6) Consumer Education	Utilization of information better aid the low-income consumers	30	noncredit	None	Grant	Feb-June, Weds., 6-9 p.m.
7) Income Tax Prep.	Aid low-income & others to understand tax procedure and filing	50	noncredit	None	Grant	Jan., M-Thurs, 6-9 p.m.
8) Secretarial-stenographic for handicapped	Aid handicapped persons to perform secretarial duties	15	C.E.U.	None	Grant	Sept-June, M-W, 6-9 p.m.
9) Tutorial Assistance	Aid in academic & personnel deficiencies	200	noncredit	None	Grant	Daily, Sept-May
10) Emergency Medical Transportation	PROJECTED		C.E.U.			Sept. 1973
11) Nursing	PROJECTED		credit			
12) Correctional Rehab-Educ. Assistance	Provide educational assistance to MCI-Plymouth and MCI-Bridgewater				Grant/CE	1972-1973
Dean Jr. Coll. - CE						
1) GED Program	PROJECTED					Fall, 1974

BEST COPY AVAILABLE

SELECTED CHARACTERISTICS OF OUTREACH PROGRAMS

BOSTON REGION

Women

INSTITUTION/PROGRAM	DESCRIPTION	# INVOLVED	CREDENTIAL	COST TO STUDENT	FUNDING	WHEN OFFERED
Lesley Jr. Coll. CE						
1) Community Schools Day Care	To provide in-service training for day care mothers	20	credit	by contract	NR	Fall 1972
2) Central Schools, Cambridge	Serves School Neighborhood Mothers	6	credit	$280	NR	Fall 1972
3) Boston Teacher Aids	To provide paraprofessional program to Boston Teacher Aids & Title I mothers	38	credit	None	NR	Fall & Spring 1972
4) Daycare	PROJECTED		2 yr. A.A.S.			
5) Daycare			4 yr. B.S.			
Boston College Summer School CE						
1) Management of Day Care Centers	Theoretical and practical info. on day care centers	28	4 Credits	280	CE	Summer 1972
Wheelock College CE						
1) Credit Spec. Prog	Div. of Employment Security contracts w/college to provide courses for WIN mothers & open job opportunities for these women	130	credit	NR	contracts	NR
2) Credit Spec. Prog	new careers under auspices of Manpower contracts w/college to provide courses for people working in daycare	128	credit	NR	contracts	NR
Tufts Univ. CE						
1) Jackson College-Cont. Ed. Prog.	Better serve needs of middle & low income urban women	30	B.A.	$3025/yr.	Budget and Grant	Sept.-June
Harvard U.-Univ. Ext.CE						
1) Practicum in Daycare	Extension course	68	credit/ noncredit	NR	Budget	Spring Wed. 4:00
2) Mgmt. & Adm. Day Care Centers	Extension course	36	credit/ noncredit	NR	Budget	Spring Tues. 4:00

Elderly

Mass. Bay C.C. CE		
1) Elder Affairs Program	w/ Off. of Elder Affairs, B.U., & Mass. Community Coll. System - PROJECTED	Fall,1973

BEST COPY AVAILABLE

SELECTED CHARACTERISTICS OF OUTREACH PROGRAMS

BOSTON REGION

Disadvantaged

INSTITUTION/PROGRAM	DESCRIPTION	# INVOLVED	CREDENTIAL	COST TO STUDENT	FUNDING	WHEN OFFERED
Boston State CE 1) Phys. Ed. & Recreation for the Handicapped	PROJECTED		M.Ed. or M.S.			Sept. 1974
2) Prog. to Recruit & Train Minority Administrators	Teacher Training--PROJECTED					Sept. 1974
3) Prisoners Released Time Ed. Program	Undergrad. degree prog. PROJECTED					Feb. 1973
4) Bilingual Programs	a) ESL; b) Spanish GED	a) 220 b) 80	none		Funding-Disadvantaged Funds	
5) GED	High School Equivalency	20	GED certificate		CE	Fall, 1972
6) Prog. to Alleviate the Minority Urban Teacher Shortage	Teacher Training	40	state teacher certification (toward MEd)		Title III	June 1972
Lesley Jr. Coll. CE 1) Boston Teacher Aide	to provide paraprofessional program to Title I aids	38	credit	None	NR	Fall & Spring 1972
Boston College Summer School CE 1) Project: Nursing Television	updating for RN's & credit	14	3 credits	$210	CE	Summer, 1972
Regis College CE 1) Spanish Institute	Spanish for Public Service Personnel who work w/ Puerto Rican Community	90	credit/ noncredit	(Funded)	Funded	Summer, 1972
Wheelock College CE 1) Supplementary Training Prog.	Gives paraprofessional community people (working in Cambridge Headstart, Brockton Headstart, Lynn Headstart, Cambridge Follow Through & Some Boston day care centers) chance to develop careers & increase on-the-job competencies	135	credit	Funded	Fed. & State Funds Contracts	Afternoons & Evenings
2) Supplementary Training Prog.	Contract courses for WIN mothers to open job opportunities for them	130	credit	NR	DES contracts	NR
3) Credit Spec. Prog.	in coop. w/ Cambridge Model Cities to provide courses toward competency and career development	140	credit	NR	Contracts	NR
Wheelock College P-T 1) COP Program	in Early Childhood Ed.	16	credit	NR	Fed. grant	NR
B.U. Metro. Coll. CE 1) Community Mental Health	Allied Health	20	credit	Funded	NIMH grant	Day & Evening
2) WIN	WIN - Malden	NR	NR	NR	Contract	Fall 1972
Brandeis Univ. P-T 1) Transitional Year Program	College preparation for disadvantaged student	NR	credit	NR	NR	Weekdays

BEST COPY AVAILABLE

ADMISSIONS REQUIREMENTS FOR CONTINUING EDUCATION PROGRAMS

WESTERN REGION

* For graduate programs, this column refers to bachelor's degree.

	NONMATRICULATED			MATRICULATED				
INSTITUTION	OPEN	HS/EQUIV.	OTHER	HS/EQUIV.*	APPLICATION	TESTS	MIN. CREDIT HOURS	OTHER
Holyoke C.C.	X			X				
Sprinfield Tech.	X			X	X		15	
American International	X		up to 18 S.H.	X	X		18	
Western New England	X	X	up to 36 S.H.	X	X	(a)		(a) for graduate programs
Springfield College	X						30	
Westfield State	X		up to 30 S.H.	X	X	X	12	
U./Mass. - Amherst	X	X			X		30	gpa - 2.0
Greenfield C.C.	X			X	X			
Berkshire C.C.	X			X	X	X		
North Adams State	X			X	X	X		gpa - 2.5

CENTRAL REGION

* For graduate programs, this column refers to bachelor's degree.

	NONMATRICULATED			MATRICULATED				
INSTITUTION	OPEN	HS/EQUIV.	OTHER	HS/EQUIV.*	APPLICATION	TESTS	MIN. CREDIT HOURS	OTHER
Quinsigamond C.C.	X			X				
Assumption	X							after one year of study
Clark	X			X	X			
Worcester State	X							moratorium - no new students accepted
Worcester Polytech.	X							negotiated
Anna Maria	X		for all RN's					open for all RN's
Mt. Wachusett C.C.	X			X	X		9	
Fitchburg State			graduate - B.A.; meet program requirements	X	X	X		successful completion of 3 courses
Framingham State	X	X		X	X	X		

NORTHEAST REGION

* For graduate programs, this column refers to bachelor's degree.

	NONMATRICULATED			MATRICULATED				
INSTITUTION	OPEN	HS/EQUIV.	OTHER	HS/EQUIV.*	APPLICATION	TESTS	MIN. CREDIT HOURS	OTHER
North Shore C.C.	X			X			6	
Salem State	X			X	X	X		
Northern Essex C.C.	X			X	X	X		
Merrimack	X	X		X	X			Bachelor - associate degree or equiv. w/ gpa - 2.0 required
Lowell Tech.		X	NR	X	X	X	16	NR
Middlesex C.C.	X				X		12	

BEST COPY AVAILABLE

ADMISSIONS REQUIREMENTS FOR CONTINUING EDUCATION PROGRAMS

SOUTHEAST REGION

* For graduate programs, this column refers to bachelor's degree.

	NONMATRICULATED			MATRICULATED				
INSTITUTION	OPEN	HS/EQUIV.	OTHER	HS/EQUIV.*	APPLICATION	TESTS	MIN. CREDIT HOURS	OTHER
Massasoit C.C.	X			X	X		12	
Bridgewater State	X	X		X	X	X		
Stonehill	X							
Bristol C.C.	X		payment of tuition & fees degree candidates must present h.s. diploma or equivalent	X				NR
Southeastern Mass. U.	X	X						NR
Dean Jr. College	X			X	X			
Cape Cod C.C.	X	(a)	(a) for credit courses only	X	X			

BOSTON REGION

* For graduate programs, this column refers to bachelor's degree.

	NONMATRICULATED			MATRICULATED				
INSTITUTION	OPEN	HS/EQUIV.	OTHER	HS/EQUIV.*	APPLICATION	TESTS	MIN. CREDIT HOURS	OTHER
Boston State			application; bachelor's degree; transcript; gpa - 2.5	X	X	X	6	undergrad. - gpa - 2.5; grad. - gpa - 3.0
Northeastern	X			X	X		40q.h.	gpa - 2.0
Boston U.	X	X		X	X	X		counseling interview; grad. - gpa - 3.0
Wheelock	X							review by participating agencies
Wentworth								
Suffolk			application to director of admissions	X	X			
Radcliffe			individual consideration					through Harvard U. Extension
Harvard	X				X		32/16°	for those who have not had college work*
Lesley			NR					NR
Pine Manor			NR					NR
Boston College-Evening	X			X	X			transcripts
Hebrew College	X							
Mass. Bay C.C.	X	X			X	X		
Tufts			individual consideration	X	X	X		(for teacher education program)
Curry	X							
Bentley	X				X			
Babson				X	X			transcripts
Mass. College of Art	X	X	graduate - transcript					Continuing Education is a nonmatriculated program

BEST COPY AVAILABLE

H. Financing, Pricing and Scholarships

DISCUSSION. II-451

The Problem of Obtaining Information on the Financial Structures of Continuing Education Programs II-451

Varied Financial Structures. II-452

Implications of Self-Support and Subordinated Administration II-452

Institutional Costs of Continuing Education Programs II-455

Pricing and Scholarships II-462

1. Table: Comparison of Tuition Charges by Regular Program (Full-time), Part-time (Regular Program), Continuing Education II-465

2. Table: "Salary Ranges and Averages for Continuing Education and Part-time Faculty". II-470

DISCUSSION OF FINANCING, PRICING, AND SCHOLARSHIPS

The Problem of Obtaining Information on the Financial Structures of Continuing Education Programs

During this study it was clear that institutional and continuing education administrators and presidents of institutions regarded finances as the most sensitive aspects of their programs and were unwilling to disclose, as a rule, the basic data necessary to compile a complete and accurate profile of revenues and costs. This was true of institutions both public and private, large and small, rural and urban. This problem of data collection is discussed more fully in Section II.I., "Administration and Management." There are several reasons for the importance attached to financial data, and the consequent reluctance to disclose them with any reasonable degree of accuracy and specificity.

First, continuing education operations in both public and private institutions are self-supporting (on an operating basis), dependent upon direct support from tuition and fees paid by continuing education students and from whatever grant or contract funds special programs generate. They seldom receive operating funds from the parent institution. Legislation prohibits the use of State funds for the support of continuing education activities in the public institutions. Furthermore, program income, expenditures, or profits and losses provide a clear index of administrative viability and some indication of educative value. These variables also provide information on the link between consumer demands and incentives institutions have to respond to. Colleges and universities thus tend to be closely guarded about the financing of their continuing education programs.

Second, rivalry among the existing continuing education programs in a given area can create competitive pricing (in tuition charges) when marketing similar programs to essentially the same clientele. As in any competitive market situation, continuing education program administrators are reluctant to make particular cost factors common knowledge.

Third, there is a difference between the real costs and the perceived costs of continuing education. Regardless of the real costs of sustaining a continuing education program (discussed in detail later in this section), which include indirect as well as direct expenditures for operations, most colleges and universities regard continuing education as a supplementary activity using available buildings. Hence income derived from this source is "surplus" with which to meet other outstanding needs of the institution. As one university continuing education director commented, university presidents treat continuing education divisions as "founts of surplus" which they have "a perfect right to tap" to pay bills when the need arises. These needs are varied and include such things as faculty travel, bookstore deficits, and repaving a parking lot, for example. Priorities are seldom set concerning either how much of continuing education's net income should be transferred to the institutional accounts or on what the institution ought to spend it. Advance planning and budgeting, therefore, are not usually a central part of the managerial style of continuing education divisions. Rather an approach of "offering many courses and then conducting only those which generate a surplus over direct costs" is typical. (In a few of the larger private institutions the process is more tightly managed than the above general comments imply.)

Fourth, cost accounting and financial management practices in continuing education are so diverse that even the elements of direct cash cost are not the same across programs (e.g., telephone may be regarded as either direct or indirect cost, as may be the salary of the continuing education director). What is treated as direct or indirect depends on the particular institution. Further, while surpluses are used to help support day program operations (in both public and private institutions) the indirect subsidy received by the continuing education operation (e.g., free campus classroom space) is rarely even exercised. Hence the words "income," "surplus," "cost" have different definitions at different institutions.

Fifth, while one might expect financial structure, pricing, and scholarship aid to be tied in to each other in some rational policy, they are not and typically are determined independently.

Sixth, presidents of private institutions are reluctant to reveal institutional financial data to a State funded study in such a time of severe public-private competition as now. Presidents of public institutions prefer to maintain a low profile on this source of discretionary funds (surplus) and faculty salary supplement (moonlighting) they have.

While there is no substitute for the kinds of budget figures requested and which institutions did not provide, some hard data was obtained where Data Formats were completed. In addition, many directors were especially helpful in discussing confidential information by letter, telephone, and in interviews. Such confidential information has been helpful to this study and is reflected in the general insights and recommendations (see Volume One), but is not described or revealed herein.

Varied Financial Structures

Much of this section on finance deals with the financial structure of continuing education at the level of individual institutions. Before proceeding to that discussion, however, Statewide financial patterns should be examined.

Among the private institutions there is less variation than among the public institutions. In all cases, the continuing education function is (big or small) a form of both "community service" and "living endowment". It is usually set up to both meet community needs and to generate income needed to meet the college's overall financial needs.

In the public institutions, the pattern is varied. There are four models which have developed under the legislative provisions that the public institutions may conduct continuing education programs "at no cost to the Commonwealth". These are the trust fund approach, the revolving fund approach, the spending limit approach, and the extended-day funded approach. The "at no cost to the Commonwealth" phrase refers to the fact that day programs are funded each year by the State through funding faculty positions, buildings, etc., based on the number of students each institution plans to enroll.

At U./Mass-Amherst, the Division of Continuing Education has been established as a trust fund operation, giving the Division nearly complete control over its funds. This discretion, plus the higher fees charged by U./Mass compared to other institutions, enables the Division to expend more money on staff and operate in a more entrepreneurial fashion, since the income-expenditure process does not involve the State, but instead a local bank (subject to State audit).

The Community College system employs the State revolving fund account approach which retains most of the discretion of a trust fund, but restricts the accumulation of funds, and does involve the State directly in the income-expenditure process.

The State College System continuing education programs are structured on the spending limit model. In this mode, the legislature authorizes a spending limit on the continuing education account. State funds may be expended up to that limit to conduct continuing education, but all revenues must go back to the State and revenues must exceed the amount spent. The State Colleges also have a procedure whereby 10% of continuing education receipts are allocated to the State College system central office to be expended for three purposes: part for a "bail-out" fund to assist small or new programs operating below break-even; part as a fund to perform research and fund projects in continuing education (e.g., the pilot open college program discussed in Section II.M. of the report is funded this way); part as a fund to support staff work for the Board of Trustees.

At U./Mass-Boston and at Lowell State College, no programs formally called "continuing education" are conducted. Rather, both schools have chosen to operate "funded part-time study", equivalent to continuing education in other public institutions, by means of operating on an extended day principle (regular budget day classes are opened to part-time students and offered at some hours more convenient to part-time students). In both cases the part-time study opportunities are totally under the control of the regular day college administration and faculty. Hence the flexibility and responsiveness of a separate continuing education division is sacrificed for the ability to have part-time study funded by the State.

Implications of Self-Support and Subordinated Administration

A dissertation research project currently underway analyzes the problem of continuing education's "self-support" in relation to the other administrative demands of "quality" and "accessibility." While the study covers only the Community College segment of continuing education and the analysis is incomplete, the 13 (as of 1972-73) Regional Community Colleges constitute a representative financial picture of the continuing education alternative system as a whole and for most institutions except the major, large private university programs.*

"Self-support" to a continuing education director means whether a course or a program "pays for itself." Although directors have some idea of the size of receipts taken in over a fiscal or academic year and a general idea about the number of courses and size of enrollments required to break even, stay in the black, or bring in a surplus, rarely do formal budgets exist. Typically directors are not fiscal agents, fiscal control being vested in the college budget officer or other administrative staff. Because budgets do not exist, in the fiscal sense it is not possible for continuing education administrators to track income and expenditures in any accountable way.

One half the directors surveyed have no control whatever over their own financial resources. They know that most of their revenues come through tuitions, fees, and contract courses, with 15% or less from Federal and State funds for special programs (such as the police science programs). They do not know, however, what surpluses or deficits they incur, or how surplus funds are used.

The other 50% of the directors report the following breakdowns of the use of continuing education revenues. On the average, continuing education divisions support four full-time personnel (director, assistant director, two secretaries, and one bookkeeper) and eleven part-time personnel in various capacities at certain times of the year. The divisions support a wide variety of administrative services, such as student records, testing services, faculty records, veterans' affairs, textbook orders, information dissemination, registration procedures, and telephones. From these expenditures, the remaining surplus revenues may be allocated to the regular day programs in a variety of proportions, for a minimum of 10-35% of the surplus to all ot it. An average figure is roughly 20% of the gross income ending up as surplus alloted to the day program.

Expenditures of these funds are varied and reflect particular needs at a given time rather than a consistent plan. Examples include use of a computer by day students, purchase of a snow plow, the salaries of full-time secretaries in the day programs, maintenance, etc..

On the other hand, colleges provide on-campus office and classroom space and a variety of equipment without charge. Although continuing education directors do not analyze the cash value of such indirect subsidies they receive, it is quite possible that the indirect costs to the college of supporting the divisions of continuing education outweigh the appropriated surpluses generated by the evening programs, particularly in the public institutions.

---

* See John H. Kendrick, Influences Upon Administrators' Capacities for Self-Determination in the Divisions of Continuing Education in Massachusetts Community Colleges: A Dissertation Proposal Submitted to the Faculty of Boston University School of Education, Boston, May 1973. More extensive reference to this work is made in Section II.I. "Administration and Management." University Consultants, Inc. wishes to thank Mr. Kendrick for permission to cite his work at this early stage. His comments and results are consistent with those arrived at independently thru the interview research of this study.

The indirect subsidy has two components: One is the cash component -- cash cost incurred by the day college as a result of evening division operation (e.g., heat, light, maintenance, etc.). Second is the equivalent value of facilities and services provided, if those facilities had to be rented by an independent continuing education division (e.g., free classroom use).

Some agree that there should be no cost associated with, for example, evening division use of classrooms which might otherwise remain idle. The point is, however, that they need not necessarily remain idle -- that there is an opportunity cost that the space could be rented out for cash (e.g., a proprietary institution or various community and private groups needing conference and meeting space might be quite interested in the classroom and office space on a university or college campus at modest rents -- at least as interested as they are in commercial rental space in an office building or hotel). It is this opportunity cost which should be reasonably calculated and added to the indirect cash costs mentioned above to calculate the indirect subsidy received by the continuing education division.

In the case of the public institutions, the continuing education programs receive an indirect subsidy from the State in the form of free space, free support services, etc. Sometimes the subsidy is direct, as in the form of some continuing education administrative personnel salaries paid out of day faculty slots. Recently the Massachusetts Legislature has been the prime force attempting to rationalize the financial structure by requiring in some institutions (yet not all) cash payments from the continuing education divisions for indirect subsidies received, and putting an end to use of day faculty slots to carry continuing education personnel. Since the current law states that continuing education is to be truly self-supporting, greater rationalization of the system would appear appropriate.

In the case of the private institutions, the continuing education divisions amount to a "living endowment." The divisions generate a surplus which is usually crucial to balancing the budget of the institution as a whole. Here, too, the continuing education division is not managed on a true total cost basis as a truly self-supporting unit. Again the indirect subsidies received by the program from the parent institution are not identified, much less quantified. More precise cost-accounting of this kind would no doubt aid private institutions in their overall financial management in the financially tight 1970's.

Institutional Costs of Continuing Education Programs

As mentioned earlier there are as many different ways of "costing" continuing education programs as there are programs. Items which are continuing education cash expenditures at one institution are an unbudgeted and non-explicit indirect subsidy at another. It is clear that the lack of "true total cost" approach to financial management makes comparisons of costs between institutions impossible. Further, so-called "surpluses" cannot be compared. Finally, rational connection of financial cost factors to pricing and tuition and to needed scholarship aid (the appropriate connection between price and clientele composition) cannot be made.

Thus, the present modes and practices of financial management (especially cost-accounting, pricing and scholarship aid), are tolerable within each institution only because of the generally off-hand way continuing education programs are administered (see Section II.I for a detailed discussion of the administrative problems of continuing education). Administrative modes and financial management practices are both a product of and a contributing factor to the "second class status" most continuing education programs hold in comparison to the regular day programs of given institutions. It is notable that at those institutions where continuing and part-time study do not hold a subordinate status but are part of the major mission of the institution (Northeastern University, Suffolk University, and Western New College to mention just three illustrations) both administrative and financial management practices are much better.

From the perspective of this report -- namely that part-time and continuing adult postsecondary education should be of equal stature and value as the traditional youth-day-model -- such off hand and imprecise administrative and financial practices are intolerable. Thus several recommendations have been made in the Volume I Summary Final Report. One basis for the analysis leading to those recommendations is the approach to uniform "total-cost" accounting and budgeting outlined below.

Given the fact that the inputs to a typical continuing education program are the same (space, faculty, advertising, etc.) regardless of institution (e.g., public or private) that the true costs for these inputs are roughly the same for everyone, and that the basic production process (educational production function) used by all institutions is roughly the same, it is safe to assume that the true total costs or "real costs" are the same for all programs with minor variations. The apparent difference in financial structures and costs between programs is largely an artifact of the different accounting and financial management philosophies and practices employed and the components of direct and indirect (explixit and implicit) subsidy received. The difference is one of cash costs of a defined administrative unit vs. true, total costs of the operation.)

The elements of true total cost are listed below:

OUTLINE FOR ANALYZING FINANCIAL STRUCTURE OF AN INSTITUTION'S CONTINUING EDUCATION PROGRAM

True Components of Cost for Continuing Education	Assessed Fair True (Market) Value or Cost	Optional Source of Coverage of the True Costs		
		Actual Cash Expenditures in Continuing Education from Continuing Education "Budgeted" Expenses	Expenditures on Continuing Education from the Continuing Education "Budget Surplus"	"Expenditures" on Continuing Education from Indirect Subsidy Received from Parent Institution
I. Personnel Services				
Administration	a	a_1	a_2	a_3
Faculty (including Adjunct)	b	b_1	b_2	b_3
Staff (Secretarial, Clerical)	c	c_1	c_2	c_3
Special Purposes (Counseling in Registrar's Office)	d	d_1	d_2	d_3
Benefits (Insurance, Retirement, Soc. Sec.)	e	e_1	e_2	e_3
Student Help (including work study)	f	f_1	f_2	f_3
II. Commodities				
Office Supplies	g	g_1	g_2	g_3
Duplicating	h	h_1	h_2	h_3

Printed Supplies	i	i_1	i_2	i_3
Mailing Service (include postage)	k	k_1	k_2	k_3
Telephone and Telegraph	l	l_1	l_2	l_3
Books	m	m_1	m_2	m_2
Subscriptions	n	n_1	n_2	n_3
Other Educational Supplies	o	o_1	o_2	o_2
III. Travel-Operationa				
Continuing Education Personnel (FT)	p	p_1	p_2	p_3
Continuing Education Personnel (PT)	q	q_1	q_2	q_3
Adjunct Personnel	r	r_1	r_2	r_3
IV. Contractual Services				
Promotion and Advertising	s	s_1	s_2	s_3
Student Activities	t	t_1	t_2	t_3
Professional Membership	u	u_1	u_2	u_3
Scholarship Awards	v	v_1	v_2	v_3
Faculty Development (In-Service Training)	w	w_1	w_2	w_3

Utilities (heat, light, wtr)	x	x_1	x_2	x_3
Sponsored Conferences, Institutes	y	y_1	y_2	y_3
Outside Printing	z	z_1	z_2	z_3
Physical Plant				
1. On Campus				
a. rent	aa	aa_1	aa_2	aa_3
b. building ammortization	bb	bb_1	bb_2	bb_3
2. Off-Campus Center				
a. rent	cc	cc_1	cc_2	cc_3
b. maintenance	dd	dd_1	dd_2	dd_3
Special Services for Off-Campus				
1. Security	ee	ee_1	ee_2	ee_3
2. Custodial	ff	ff_1	ff_2	ff_3
Equipment Rentals	gg	gg_1	gg_2	gg_3
Equipment Maintenance	hh	hh_1	hh_2	hh_3
Entertainment	ii	ii_1	ii_2	ii_3
V. Institutional Support Services				
General Administration	jj	jj_1	jj_2	jj_3
Financial Aid Office	kk	kk_1	kk_2	kk_3
Student Employment Office	ll	ll_1	ll_2	ll_3
Student Activities	mm	mm_1	mm_2	mm_3
Guidance and Counselling Service	nn	nn_1	nn_2	nn_3
Registrar	oo	oo_1	oo_2	oo_3

Business Office 1. Budget	pp	pp_1	pp_2	pp_3
2. Audit	qq	qq_1	qq_2	qq_3
3. Purchase	rr	rr_1	rr_2	rr_3
4. Bursar/Cashier	ss	ss_1	ss_2	ss_3
Public Relations, Publications Office	tt	tt_1	tt_2	tt_3
Computer Center	uu	uu_1	uu_2	uu_3
Library	vv	vv_1	vv_2	vv_3
Media (A-V, film, TV, radio)	ww	ww_1	ww_2	ww_3
Cafeteria	xx	xx_1	xx_2	xx_3
Gymnasium	yy	yy_1	yy_2	yy_3
Custodial (buildings and grounds)	zz	zz_1	zz_2	zz_3
VI. Equipment				
Capital (office furniture, classroom equipment)	aaa	aaa_1	aaa_2	aaa_3
Laboratory - Capital Consumables	bbb	bbb_1	bbb_2	bbb_3
Media - Capital Consumables	ccc	ccc_1	ccc_2	ccc_3
VII. Miscellaneous VII. Miscellaneous (any significant service or item omitted above)	ddd	ddd_1	ddd_2	ddd_3
	Total True Cost	Total Cash Expenditures in Continuing Education from Continuing Education "Budgeted" Expenses	Total Expenditures on Continuing Education from the Continuing Education "Budget Surplus"	Total "Expenditures" on Continuing Education from Indirect Subsidy Received from Parent Institution

For each letter then $a = a_1 + a_2 + a_3$ must obtain as must the equation:

$$\begin{bmatrix}\text{Total}\\ \text{True}\\ \text{Cost}\end{bmatrix} = \begin{bmatrix}\text{Total cash}\\ \text{expenditures in}\\ \text{continuing education}\\ \text{from continuing}\\ \text{education}\\ \text{"budgeted" expenses}\end{bmatrix} + \begin{bmatrix}\text{Total}\\ \text{expenditures on}\\ \text{continuing}\\ \text{education from}\\ \text{the continuing}\\ \text{education "budget}\\ \text{surplus"}\end{bmatrix} + \begin{bmatrix}\text{Total}\\ \text{"expenditures"}\\ \text{on continuing}\\ \text{education from}\\ \text{indirect}\\ \text{subsidy received}\\ \text{from parent}\\ \text{institution}\end{bmatrix}$$

or, $\text{TTC} = \text{TCE} + \text{TES} + \text{TEIS}$

The operation at each institution, therefore, is what the figures a_1, a_2, and a_3 are in each case, and it is suggested that institutions use this approach to rationalize their own financial management. The problems with present financial management patterns is that the equation which usually is used is

$$\text{Partial (visible) Cost} = \text{TCE} + \text{TES}$$

wherein the dollar value of the indirect subsidy is ignored.

The implications of this are considerable. If, for example, an operation is to be truly self-supporting, then it should recover and repay the indirect subsidy. This usually would mean higher tuition charges. If on the other hand a subsidy is decided upon as a matter of policy, then that subsidy ought to be explicit, and the option of providing it to students directly rather than to divisions of continuing education indirectly ought to be explored.

In an effort to make an accurate assessment of the true costs of continuing education, twelve continuing education administrators whose programs were carefully selected for their representatives were surveyed. They were asked to indicate exact dollar amounts budgeted for and paid out of the continuing education budget (or revenues) for service or items specifically in direct support of continuing education for fiscal year 1971-72 and for Fall 1972. Budget items were those noted above. If continuing education funds were not budgeted for or expended on a particular item, -0- was to be recorded. If the item or service was paid for out of surplus funds at year's end, this was to be noted in a special section for the itemization or allocated surpluses.

This survey corroborated the preliminary findings of the Kendrick administration study noted earlier. In many cases the respondent to the inquiry was not the director of continuing education but a staff member from the president's or budget office. Budgets generally do not exist for the continuing education programs. As one reply from a president's office put it : "We do not run continuing education on a planned budget system. Our expenses are governed by the success of the operation. " Reporting institutions, listed by line item all expenditures paid out in that category, whether in direct support of continuing education or not.

The resulting profile of cash expenditures indicates an average of 81% spent for faculty salaries, 7% for administrative personnel, 3% on commodities, 2.6% on support services, 2.6% on promotion, 2.2% on equipment, and 1.6% on off-campus rentals within the continuing education program. These percentages parallel those reported segmentally for the State college system in 1970-71.* By cross-checking other known or reported facts about a specific program, it was possible to extrapolate from the expenditures to percentage amounts of the allocated surplus paid into college acounts for regular college use. In many cases, non-continuing education administrators and clerical staff are paid wholly or in part from these revenues on the grounds that they contribute to continuing education.

Continuing education revenues cover many expenditures which may or may not be directly associated with those programs. On the other hand, the college is not reimbursed for many large indirect costs. These include on-campus rents, utilities, custodial, building ammortizations, faculty and staff benefits, support services (library, media, gymnasium security), and like indirect service costs. Depending on the institution and the size of the continuing education program, these overhead costs average a minimum of 20% to 30% of the program's annual revenue. They are not assessed and levied in any rational system or procedure. Arbitrary skimming by day colleges of between 10% to 30-40% of total continuing education services indicates unsystematic planning and management, making a self-supporting program far riskier than it need be.

Pricing and Scholarships

Introductions to the following table on "Tuition Charges per Credit Hour " discuss comparative tuition charges by full-time, part-time and continuing education categories, by regions and public-private institutions. The figures themselves are interesting because they show large pricing variables across the state. These differences exist in part because of the public/private breakdown (continuing education programs are in many ways a function of the regular program and are priced accordingly), in part because those programs charging low (below $20 per credit hour) or high (above $ 30 per credit hour) are really not competitive and are offering a product so unique that the existing clientele is identified, recruited, and "sold" at that level. Even more significant reasons than these explain why pricing varies the way it does.

Private institutions are more directly responsive to market demands than the publics. Depending upon costs, they may- and do-raise or lower prices at will. The pricing policies of the State College System and Regional Community College Board, which set prices for their institutions Statewide, reflect a variety of considerations, among which are: historic concern of State institutions to keep tuitions low on the assumption that cheap prices will benefit more people; recent trends in raising tuition and fees to meet rising costs; last year's prices which act as a base albeit a fairly arbitrary one; and the gradual appearance of modest State and Federal assistance plans based on financial need, which are open to half-time students.

---

* See 1972 Report. Task Force on Continuing Education. Massachusetts State College System. Page 7

BEST COPY AVAILABLE

Fees--an additional and highly lucrative source of revenues for the programs--are more numerously and flexibly administered by the division of continuing education than tuitions. In many cases they represent hidden costs to the student clientele and can easily double his cost of education. Institutions, both public and private, could do a much better job than they do in publishing full and complete pricing information for prospective clienteles. This does not constitute an argument against a flexible fees policy. Indeed, flexible fees to cover variable costs offer and example of flexible pricing or programs, representing a closer approximation of operational costs, than does a flat per-credit-hour tuition charge.

In spite of these considerations, it can be argued that public institutions, through belief that they are serving a large number of low income students, are holding tuition charges at unreasonably low levels. The student questionnaire data compiled in this report, however, reveals that few lower income students are in continuing education, that there is basically no difference between the student profile of public and private institutions, and that, therefore, the prime beneficiaries of low continuing education tuition are middle and upper middle income students and employers who reimburse tuition, both groups which can afford to pay more. The need of low income adults for continuing education vouchers is discussed in the Volume I Summary Report of this Study.

Increased revenues through higher tuition prices, reflecting true costs of continuing education, would make continuing education not only more genuinely autonomous -- divisions of continuing education could pay their own ways vis-a-vis the regular programs -- but would make more possible the availability of State funding for low-income continuing education clientele through a more rational linking of true costs to tuition charges to scholarship availability for needy students. If a continuing education or part-time student is one-half time or more, he is eligible for the various Federal and State programs. These include Economic Opportunity Grant, National Defense Student Loan, College Work Study, and Guarenteed Student Loan Program. The intent of these programs is to bring genuine equal educational opportunity to low-income students.

Two existing state voucher programs must be discussed in any discussion of student aid. The so called teacher-vouchers and veterans-vouchers are really not vouchers at all for they carry no money attached to them. Nevertheless, they set an important precedent for the use of specific-clientele-group vouchers in Massachusetts, a precedent applicable to other groups (e.g., low-income disadvantaged).

The problem with the present "veterans vouchers " is that as voted by the Legislature they entitle a veteran to take continuing education courses free at public institutions subject to the approval of the institutional governing boards. However, the "veterans vouchers" cannot be redeemed by an accepting institution for cash from the State. Thus, they really are not vouchers at all from the point of view of education finance theory, or from the perspective of a budget conscious continuing education administrator. What happens is that veterans are enrolled in classes which still have to break-even on the tuitions of other students, and hence classes are larger than would otherwise be the case, and support expenditures for the classes are less per student. In effect the "veterans voucher" entitles the veteran to a free but diluted course and education.

Because of this factor of dilution of educational quality, and because of the problems of the occupying of class slots by non-paying students when they could be occupied by cash-paying customers, the Board of Regional Community Colleges has exercised its right to refuse acceptance of veterans vouchers at the community colleges. The Board of Trustees of State Colleges has not yet made the same decision, but some pressures exist to do so.

A solution is for the Legislature to make the veterans vouchers truly vouchers which carry a cash value. This would require a specific appropriation. It that were done, the vouchers could also be made useable at private institutions.

The second major voucher plan in operation is the State College System " teacher voucher. " In return for school system teachers supervising State College day students in student teaching, the College grants them a non-specific "teacher voucher" entitling the teachers to a free course in continuing education at any State College. Exactly the same problems of revenue loss and dilution of educational quality as described above for the "veterans vouchers " apply, and there is considerable sentiment in the State College System against the teacher vouchers in their present form (i.e. without their being redeemable in cash by the recipient institution).

The solution here too is for the Legislature to make them truly vouchers with a cash value. If student teacher supervisors have to be paid, then they should be paid as a direct cost of operation of the day programs at the Colleges and appear as a line item in the budget of the day College. The present arrangement means that cash paying students in continuing education have to absorb an expense of the day college by having their classes diluted in quality due to resource constraints.

As yet vouchers do not exist for low-income and disadvantaged, the elderly, or other needy clientele groups. That these groups might be included in a revised and rationalized true voucher scheme of assisting special groups is discussed for possible legislative action in Volume 1 - Summary Final Report of this study.

II.H.1. Table: Comparison of Tuition Charges By Regular Program (Full-time), Part-time (Regular Program), Continuing Education

Introduction

About half of the institutions surveyed did not report tuition and fees as requested. Since most of the institutional catalogues and continuing education promotional literature were readily available, it was possible to supplement the Data Formats to compile a fairly complete pricing picture of continuing education and part-time studies and to compare these prices with each other and those of the regular program.

This table displays tuition charges for the regular, full-time program ("standard tuition"), for part-time study in the regular program, and for study in continuing education. Institutions report these charges in a variety of ways. Full-time study is described by semester or academic year. Residential institutions often include board and room with tuition charges. Per course tuition is usually for a three credit course, sometimes a four credit course. These differences in reporting have been converted to "tuition charge per credit hour" for ease of comparison. Various computations were necessary to do this; e.g., conversion from quarters to semesters in some cases, separation of fees from tuition, definition of "full load" as 15 semester credits, a "course" as the equivalent of 3 credits, and so forth. These computations are not shown on the chart. When explanatory information was available, it is rendered in parentheses.

Three observations can be made on the basis of this display:

There is little consistency in an institution's prices for the three educational areas covered. One college may charge a competitive tuition in the regular program and an extremely high one for its continuing education courses. Another may do just the reverse, while a third may charge the same per credit hour in all three areas. In this sense, pricing is a function of the financing of the three educational areas and their fiscal interrelationships within the institution.

Regardless of region, public institutions charge much more for continuing education than part-time--roughly twice as much--which reflects the subsidized status of the regular program and the self-supporting status of continuing education. As noted in the chart on salary ranges, part-time faculty is compensated twice as much as continuing education instructors. The reverse ratios of pricing and salaries have to do with the difference between source of funding, although the necessity for such a large differential is not at all clear.

Public tuitions are on the average substantially lower than private tuitions.

BEST COPY AVAILABLE

TUITION CHARGES PER CREDIT HOUR*
By Regular Program (Full-time), Part-time (Regular Program), Continuing Education

CENTRAL REGION

INSTITUTION	STANDARD TUITION	PART-TIME	CONTINUING EDUCATION
Public			
Fitchburg State College	$30/credit hour	$20/credit hour	$12/credit hour
Framingham State College	$6.66/credit hour	--	$10/credit hour - evenings $25/credit hour - days $22/credit hour - "External Degree Program"
Mt. Wachusett	$6.66/credit hour	$13/credit hour	$20/credit hour - Gardner campus $22/credit hour - Ft.Devens campus
Quinsigamond C. C.	$8.99/credit hour	$13/credit hour (p.t.=less than 8 cr.hrs.)	$21/credit hour
Worcester State	$30/credit hour	$1[illegible].50/credit hour (up to 7.5 credit hours)	$22/credit hour
Private			
Anna Maria College for Women	$56.66/cred[illegible]	$60/credit hour	--
Assumption	$73.33/credit hour	$80/credit hour (p.t.=less than 12 cr.hrs.)	$40/credit hour
Clark University	$43.33/credit hour	$110/credit hour	$38/credit hour
College of the Holy Cross	$43.83/credit hour	$90/credit hour	--
Leicester Jr. College	$56.66/credit hour	$56.66/credit hour	$30/credit hour (1 cr. course)
Nichols College	$65/credit hour	--	--
Worcester Jr. College	$31.66/credit hour	$40/credit hour (p.t.=less than 12 cr.hrs.)	$25/credit hour
Worcester Polytech Inst.	$90/credit hour($33.33/cr.hr;"professional"cr)	$90/credit hour	--

NORTHEAST REGION

INSTITUTION	STANDARD TUITION	PART-TIME	CONTINUING EDUCATION
Public			
Lowell State	$18/credit hour	$18/credit hour	--
Lowell Tech	$6.66/credit hour	$10/credit hour	--
Middlesex C. C.	$6.66/credit hour	--	$20/credit hour
North Shore C. C.	$8.33/credit hour	$13/credit hour (p.t.=8 or fewer semester hrs.)	$17/credit hour
Northern Essex C. C.	$6.66/credit hour	$13/credit hour	$18/credit hour
Salem State	$20/credit hour	$27/credit hour	$22/credit hour (noncredit: $10) (FT day students: $12)
Private			
Bradford College	$73.33/credit hour	$30/credit hour	--
Endicott Jr. College	$61.66/credit hour	$60/credit hour	--
Gordon College	$68/credit hour	--	--
Merrimack College	$50/credit hour	--	$25/credit hour

*Information supplied by institutions; analysis for "charge per credit hour" performed by U.C.I.

TUITION CHARGES PER CREDIT HOUR*

BEST COPY AVAILABLE

By Regular Program (Full-time),
Part-time (Regular Program), Continuing Education

SOUTHEAST REGION

INSTITUTION	STANDARD TUITION	PART-TIME	CONTINUING EDUCATION
Public			
Cape Cod C. C.	$6.66/credit hour	$22/credit hour	$22/credit hour
Bridgewater State	$6.66/credit hour	$7/credit hour	$18/credit hour
Bristol C. C.	$6.66/credit hour	$16/credit hour	$22/credit hour
Mass. Maritime Academy	$17.50/credit hour	--	$22/credit hour
Massasoit C. C.	$6.66/credit hour	$13/credit hour (p.t.=less than 9 cr.hrs.)	$18/credit hour
Southeastern Mass. Univ.	$10/credit hour	$15/credit hour	$20/credit hour
Private			
Dean Junior College	$83.33/credit hour	$40/credit hour	$25/credit hour
Wheaton College	$103.33/credit hour	--	--
Stonehill College	$85.83/credit hour	$66/credit hour	$35/credit hour

BOSTON REGION

INSTITUTION	STANDARD TUITION	PART-TIME	CONTINUING EDUCATION
PUBLIC			
Boston State College	$10/credit hour	$18/credit hour	$18/credit hour
Mass. Bay C.C.	$8.33/credit hour	$16/credit hour (p.t.=less than 9 credit hours)	$21/credit hour (Community Service Courses: $12-$16/cr. hr.)
Mass. College of Art	$10/credit hour	--	$22/credit hour
U./Mass. - Boston	$8.33/credit hour	$15/credit hour	--
Bunker Hill C.C.	$10/credit hour	$16/credit hour	$16/credit hour
Roxbury C.C.	$10/credit hour	$20/credit hour	$20/credit hour
Quincy J.C. (Municipal)	$20/credit hour	$19/credit hour	$19/credit hour
Newton J.C. (Municipal)	$20/credit hour	$25/credit hour	($10/course - non-credit)
PRIVATE			
Babson College	$78.33/credit hour	$83.33/credit hour	$5.33-$6.53/credit hour
Bentley College	$60/credit hour	$50/credit hour	$50/credit hour
Boston College	$86.66/credit hour	$75/credit hour	$45/credit hour
Boston University	$83/credit hour	$104/credit hour	$50/credit hour
Brandeis University	$96.66/credit hour	--	$120.83
Eastern Nazarene	$42/credit hour	$70/credit hour	--
Emerson College	$72.50/credit hour	$90/credit hour (max. 9 credit hours)	--
Emmanuel College	$70/credit hour	$55/credit hour	$70/credit hour

*Information supplied by institutions; analysis for "charge per credit hour"performed by U.C.I.

BEST COPY AVAILABLE

TUITION CHARGES PER CREDIT HOUR*
By Regular Program (Full-time), Part-time (Regular Program), Continuing Education

BOSTON REGION

INSTITUTION	STANDARD TUITION	PART-TIME	CONTINUING EDUCATION
Garland Jr. College	$70.00/credit hour	$60.00/credit hour	Returning Alumni: $30.00/credit hour All others: $60.00/credit hour
Grahm Jr. College	$55.83/credit hour	$50.00/credit hour	--
Harvard University	$100.00/credit hour	--	$5.00/course + $5.00/credit hour
Hebrew College	$15.00/credit hour	$27.50/credit hour	$10.00 and $20.00/credit hour
Lasell Jr. College	$65.83/credit hour	$65.00/credit hour	--
Lesley College	$78.33/credit hour	$75.00/credit hour	$75.00/credit hour
Mt. Ida Jr. College	$62.50/credit hour	$50.00/credit hour	--
Mass. Institute of Tech.	$96.00/credit hour	$46.00/credit hour (minimum fee: $550.00)	--
Newton College	$71.87/credit hour	$70.00/credit hour (maximum: 8 credit hours)	$70.00/credit hour (maximum: 8 credit hours)
Northeastern University	$65.00/credit hour - freshmen $83.50/credit hour - all others	$35.00/credit hour	$35.00/credit hour
Pine Manor Jr. College	$96.66/credit hour	--	$31.25/credit hour
Radcliffe College	$100.00/credit hour	--	(Radcliffe Institute: $125.00/seminar)
Regis College	$83.33/credit hour	$60.00/credit hour	--
Simmons College	$80.00/credit hour	$80.00/credit hour	$80.00/credit hour
Suffolk University	$46.66/credit hour	$40.00/credit hour	$40.00/credit hour
Tufts University	$106.66/credit hour	--	$133.00/credit hour
Wellesley College	$130.00/credit hour	$116.66/credit hour	$116.66/credit hour
Wentworth Institute	$53.33/credit hour	$33.33 - 66.66/credit hour	$33.33 - 66.66/credit hour
Boston Architectural Center School of Architecture	$19.33/credit hour - entering students $17.66/credit hour - all others	Individual Program Basis	Individual Program Basis
Franklin Institute	$40.00/credit hour	$50.00/credit hour (p-t=under 12 credit hours)	$180.00/term $30.00/credit hour for partial program
School of the Museum of Fine Arts	$61.66 - 79.63/credit hour Bachelor's program $61.66/credit hour - Diploma program	$40.00 - 46.33/credit hour	$36.66/credit hour
Curry College	$80.00/credit hour	$65.00/credit hour	$50.00/credit hour
Bryant-Stratton School of Commerce	$53.80 - 59.06/credit hour	$53.00/credit hour	$40.00/credit hour
Burdett College			–
Chamberlayne Jr. College	$50.00/credit hour	$45.00/credit hour	$45.00/credit hour
N.E. Conservatory of Music	$93.33/credit hour	$80.00/credit hour	($7.50/half hour - noncredit)

*Information supplied by institutions; analysis for "charge per credit hour" performed by U.C.I.

II.H.2. Table: "Salary Ranges and Averages for Continuing Education and Part-time Faculty"

Institutions were solicited for information about the compensation per course paid faculty in both the continuing education division and the part-time operations of the regular academic program. Salary ranges and average salaries actually paid were asked for, as well as the differences in pay scale, if any, between continuing education/part-time faculty and regular/adjunct faculty. A fairly large number of the private institutions did not report any of these figures (N/R), while almost all of the reporting institutions gave the range only and omitted averages or other differentiating data.

Unless otherwise noted, salary ranges are given for three credit hours or their equivalents. Unless identified with an asterisk (*), indicating an institution's reported average salary, all averages are arithmetic, computed for ease of comparison. The six institutions reporting averages for continuing education salaries indicate actual pay slightly higher than arithmetic averages. Most institutions gave no criteria for compensation. Those who did indicated that faculty rank (instructor through professor) is the exclusive criterion for most institutions for both continuing education and part-time teaching. A few Directors of Continuing Education indicated that they had instituted alternative criteria for compensation, such as length and quality of service to continuing education or results of student/peer/staff evaluations; these alternative criteria are very much the exception to the rule, however.

This data, incomplete as it is, suggest three areas of significance. They are:

--- Difference in ranges between continuing education and part-time. Some institutions make no distinction between the two; this suggests that part-time teaching is regarded as an extension and continuing education function. Most public institutions, however, have a part-time range which is twice that of continuing education, suggesting that part-time is a pro rated function of regular departmental offerings with little or no relation to the mission of a continuing education division. It should also be noted that the personal service account of an institution's operating budgets supports part-time activity, while the tuition-based revenues of continuing education compensate teachers in the division. This difference in source of funding may account for the difference in ranges.

--- Difference in ranges, by Region, between public and private institutions. The range of compensation in the public sector is much smaller than that of the private sector. Private institutions both pay far less and far more than the publics. Those private continuing education programs with compensation averages below $700 per course are not competitive with the public sector. Those paying $900 or more per course are competitive with one another and not with the publics. In the Boston Region, where the big privates are located, salary ranges and averages are the highest among the privates, from $200-300 higher than public institutions.

--- Salary information not reported (N/R). A number of Directors and Deans who did not submit information about compensation were polled by telephone. Some declined to reveal their ranges on the basis of policy. This response may be taken as further indications of the degree to which funding, costing, and pricing matters are regarded as sensitive areas and not open to reportage, analysis, or discussion.

BEST COPY AVAILABLE

FACULTY SALARY RANGE AND AVERAGES
WESTERN REGION

INSTITUTION	CONTINUING EDUCATION		PART-TIME	
	Range/3 cr. hr. course	Average	Range	Average
Public				
Holyoke C. C.	$750-870	$810	$835-2025	$1430
U./Mass. - Amherst	$750-900	$825	($11,719-25,249 full-time salary only)	$18,484
Springfield Tech.	$600-915	$757	NR	
Greenfield C. C.	$675	$675	FT: $1080-1996 PT: $900	$1538 $900
Westfield State College	$560-860	$705	No part-time	
Berkshire C. C.	$600	$600	No part-time	
No. Adams State College	$560-860	$750*	NR	
Private				
Western N.E. College	$448-750	$630*	$700-2159	$1430
American Int'l. College	$600-775	$688	$600-775	$688
Springfield College	$405-565	$485	No part-time	
Bay Path Jr. College	NR		No part-time	

CENTRAL REGION

INSTITUTION	CONTINUING EDUCATION		PART-TIME	
	Range	Average	Range	Average
Public				
Framingham State	$560-850	$705	$1734-3249	$2491
Quinsigamond C.C.	$850	$850	$850	$850
Mt. Wachusett C.C.	$758-870	$814	$735-875	$805
Fitchburg State	$560-850	$705	No part-time	
Worcester State	$560-850	$750*	$730-2545	$1638
Private				
Leicester J.C.	NR		$850-1200	$1025
Clark University	$930	$930	NR	
Assumption	NR		NR	
Worcester Polytechnic	NR		NR	
Anna Maria College	$750-900	$852	$855-1609	$1232
College of the Holy Cross	No CE		$1000-19,813 (not a per course basis)	$10,406

*Indicates average supplied by institution

FACULTY SALARY RANGE AND AVERAGES
NORTHEAST REGION

BEST COPY AVAILABLE

INSTITUTION	CONTINUING EDUCATION		PART-TIME	
	Range	Average	Range	Average
Public				
Salem State College	$560-850	$705	No part-time	
Lowell Tech	NR		No part-time	
Middlesex C.C.	$650-800	$725	No part-time	
No. Shore C.C.	$660-820	$740	No part-time	
No. Essex C.C.	$722.25	$722.25	No part-time	
Lowell State College	No CE		$1250-2250	$1750
Private				
Endicott J.C.	No CE		NR	
Merrimack	$525-600	$563	No part-time	

SOUTHEAST REGION

INSTITUTION	CONTINUING EDUCATION		PART-TIME	
	Range	Average	Range	Average
Public				
Mass. Maritime	New Program, no data available		$1000-17,000	$9000
Cape Cod C.C.	$755-915	$835	NR	
S.M.U.	NR		NR	
Bristol C.C.	$735-861	$798	$735	$735
Bridgewater State	$560-850	$760*	No part-time	
Massasoit C.C.	NR		No part-time	
Private				
Dean J.C.	$699	$699	PT: $630-795 FT: $930-1299	$713 $1115
Wheaton	No CE		$1730-3020	$2375
Stonehill	$200-600	$400	$725-850	$787

*Indicates average supplied by institution

BEST COPY AVAILABLE

FACULTY SALARY RANGE AND AVERAGES
BOSTON REGION

INSTITUTION	CONTINUING EDUCATION		PART-TIME	
	Range	Average	Range	Average
Public				
Mass. College of Art	$560-850	$700*	No part-time	
Mass. Bay C.C.	$715-915	$815	No part-time	
Boston State	$560-850	$705	No part-time	
U./Mass. - Boston	No CE		$1500/course for PT lecturers ($11,750-2600 $18,875 salaried FT)	
Private				
Babson	No CE		$900	$900
Bentley	NR		No part-time	
Boston College				
(summer)	$600-925	$762	--	
(evening)	$800	$800		
(Management)	--		$700-1000	$850
(Day Program)	--		$750	$750
Boston University	NR		NR	
Brandeis	No CE		NR	
Eastern Nazarene	No CE		No part-time	
Emerson	No CE		NR	
Emmanuel	No CE		$1000-2761	$1880
Garland J.C.	No CE		FT: $937-1470 PT: $937-1500	$1203 $1218
Grahm J.C.	No CE		NR	
Harvard	NR		No part-time	
Hebrew T.C.	$900-1000	$950		
Lasell J.C.	No CE		NR	
Lesley	NR		No part-time	
Mt. Ida J.C.	No CE		$800	$800
M.I.T.	No CE		No part-time	
Newton	$1000 per (4 credit) course		$1000 per (4 credit) course	
Northeastern	NR		No part-time	
Pine Manor J.C.	$1000	$1000	No part-time	
Radcliffe	NR		No part-time	
Regis	$750-1000	$875	No part-time	
Simmons	NR		No part-time	
Suffolk	$700-2275	$700	No part-time	
Tufts	$800-1000	$900	NR	
Wellesley	No CE		$2400-5150	$3775
Wentworth	($20-36 night)		No part-time	
Wheelock	$750-1200	$946*	$750-1250	$1000

*Indicates average supplied by institution

BEST COPY AVAILABLE

I. Administration and Management of Continuing and Part-time Postsecondary Education

DISCUSSION. II-477

Problems of Data Collection and Analysis II-477

Deans and Directors. II-478

The Continuing Education/Part-time in Regular Programs Mix II-479

Other Administrative Mixes II-481

Status and Source of Faculty II-482

Nontraditional Studies II-483

Common Administrative and Management Problems. . . II-483

Issues in Administration and Management. II-485

1. Table: Administration of Continuing Education by Title of Office II-487

DISCUSSION OF ADMINISTRATION AND MANAGEMENT OF CONTINUING AND PART-TIME POSTSECONDARY EDUCATION

Problems of Data Collection

The Data Formats circulated by this study to institutional Deans and Directors of Continuing Education and Registrars contained a number of sections soliciting both detailed and general information and comments about the administration and management of continuing and part-time postsecondary education. The intent was to do a methodologically and numerically rigorous analysis of various aspects of administration and management. This data was supplemented with subjective information and observations from interviews. In many cases data could not be obtained, however, or its meaning and comparability were unclear due to brevity. The problem of data collection is even more serious in the area of costs and financing and will be dealt with more extensively in that Section (see Section II.H.). The various reasons for these problems are mentioned below because of their pertinence to the whole subject of administration and management and because some of the reasons for the paucity of information are a direct result of problems inherent in the current structure and status of continuing education within the Commonwealth.

The Data Formats requested information which is alternately not regularly collected or recorded by the institutions or the segments or not comfortably reported. The fact, however, that there was a significant amount of data provided indicates that facts and figures can be assembled in situations where an institution is committed to doing so. The annual Financial Reports and Enrollment Data for State college continuing education compiled for the Board of Trustees of State Colleges illustrates that data collection and analysis are achieved when governing boards and central staff decide that it should be done.

If data collection is difficult but possible, it is nonetheless true that there is widespread reluctance to make certain data available and to address basic issues openly and directly. This is more true of financial matters than administrative matters. To do so would be to raise questions about the status, function, and purpose of continuing studies within the post-secondary systems of Massachusetts. By and large these questions have not been discussed publically heretofore because of their sensitivity; the reluctance to do so now is therefore understandable. This section on Administration and the following section on Finance must be read with these considerations in mind. Confidential data provided by various individuals is necessarily used, but it, combined with the data herein has provided the basis for the recommendations on administration and management in the Summary Final Report (Volume One) of this study.

Beyond the problems of reluctance and confidentiality, the further problem of diversity of administrative models exists. There are as many variations as there are institutions. The variations occur along dimensions of status of the continuing education program, powers of its administrative head, intra-college personalities and politics, administrative procedures and record-keeping, curriculum design and approval procedures, etc. In short each institution has its own style and informal structure, though the formal structures may look alike. The powers and role of academic deans in day colleges is fairly uniform, for example, across all institutions and the term Academic Dean conveys a corresponding administrative meaning. The term Director of Continuing Education has much more varied and institution specific meanings.

Deans and Directors

Ninety-four institutions were surveyed for information about the management of their continuing education programs and the place they hold in the administrative organization of the institution. Of the 73 institutions which report a continuing education program of some kind, ten are administered on a part-time basis by staff or faculty with other duties (e.g., registrar, academic dean, program advisor, coordinator). Of the remaining 63 institutions, both public and private, there are 43 directors and 20 deans. The directors are evenly divided (21:22) between publics and privates. Seven of the deans are at public institutions, 13 at private institutions.

Almost half (28) of the State's continuing education deans (12) and directors (17) are located in the Boston Region by virtue of the location of a large number of private institutions with large programs including some of the largest in the country. Although at both public and private institutions in the Boston Region, directors outnumber deans by a 3:2 majority, in the other four Regions, the number of deans in proportion to directors is quite small. A high percentage of privates in other regions report either no programs at all or ones sufficiently small so as not to require a dean or director. As is obvious from this brief overview, then, the title of a continuing education administrator is a function of the status of the program at a particular institution (and kind of institution) and of the prevailing philosophy and style of administration where it is housed.

Two interesting phenomena may be observed on the basis of this data. First, private colleges and universities maintain and support not only the largest operations but accord them "school" or "college" status within the university structure, commensurate with their education, administrative, and fiscal importance (e.g. Northeastern and Boston Universities). By contrast, in most of the public institutions programs are run by a Director rather than a Dean and often the Director's authority is limited, being held by the institution's academic and administrative deans and its president.

Second, whether an institution is public or private, its table of organization suggests that a dean carries greater responsibilities for for program, faculty, policy, and budget matters than most directors do (and with it, a higher salary, greater status, and political clout). While there are notable exceptions to the rule at both public (Middlesex Community College, for example) and private (Bentley College, for another) colleges, continuing education programs headed by a dean rather than a director are afforded greater prestige and importance within the institution and function more effectively as a result. This often means reporting directly to the president, control over courses and programs and competitive leverage at budget time. Directors, in contrast, further down the pecking order, at the middle management/service level, usually report to an academic dean or his assistant, share control over courses and programs with several administrators and committees, and have very little control over budgetary matters. Deans and directors are both expected to be "managers." Directors, however, are often excluded from the real policy-making councils of the institution, which may thwart rather than enhance the sound management of the very programs they must supervise and administer.

Among the directors of continuing education within the public institutions, there is unanimous agreement that full line deanship for the administrative head of a continuing education program was desirable to give continuing education full equal status as an educational effort within the parent institution. This rationale reflects a concern that continuing education should be afforded an appropriate place in the administrative structure, commensurate with its increasingly important role and function.

Presently there are wide differences between individual institutions in terms of the power and responsibility a Director of Continuing Education has. The range is from "directors" who are the equals of line deans in their college to "directors" who are in effect administrative assistants to the President and Academic Dean of the day college.

The Continuing Education/Part-Time Mix

Strategies of administering the two kinds of programs vary dramatically with the size and nature of the institution. Some private institutions with national educational missions stressing traditional academic learning and research in many instances do not have a school or division of continuing education and report that part-time study rarely occurs at the undergraduate level. In such institutions some of the noncredit functions of continuing education are carried out by offices of community service, special programs, and adult education. An anomaly is Harvard's University Extension, which provides extensive courses with large enrollments and even programs leading to associate and bachelor's degrees in "extension studies." It is an anomaly because although the subject matter and teaching formats are traditional, there is no administrative or academic relation with Harvard's undergraduate programs; although the division is administratively autonomous, financial support for it is supplied almost entirely by the University.

Large private institutions which do have continuing education programs and encourage part-time study as well, administer continuing education through a separate school or college headed by a dean. The sponsoring university uses this mechanism for focusing its outreach function, examples of which are Metropolitan College at Boston University and University College at Northeastern University. Northeastern is unique in having its university-wide continuing education coordinated by a dean as well as a focus of efforts in a college. The relative importance of continuing education to the educational mission of these large private institutions is related to their corresponding policies of encouraging and supporting part-time studies, and vice versa.

Smaller private institutions, whether liberal arts or specialized in nature, regard part-time and continuing study in ways as varied as is conceivable. Some institutions (Western New England College, Suffolk University, Springfield College and Worcester Junior College are examples) treat part-time and continuing study as an activity of equal importance to day programs. In other institutions, educational programs beyond full-time regular ("day") study are sometimes coordinated by the same office; e.g., evening and summer courses are handled much like graduate work, extension, and part-time study. In other situations, continuing or adult education is equated with non-credit self improvement courses and community service, with all "academic" programs handled by the appropriate office (e.g., admissions, testing, counseling, registrar) and coordinated by the academic dean. Increasingly, however, small private colleges sense the educational and financial possibilities in continuing education. A discernible trend is the appointment of a full-time dean or director reporting directly to the president, with development and management responsibilities such as extending the day program into the evening, offering courses off campus at the convenience of the students, and a variety of non-traditional formats with appeal to persons not previously served. The success of these ventures is directly related to the college's perception of its educational mission and its ability to translate this mission into the quite frankly innovative and entreprenurial possibilities and style of continuing education. Not all colleges, particularly those most tightly wedded to the notion of higher education as the traditional four-year liberal arts curriculum, will be able to utilize these possibilities to the utmost.

The relation between continuing and part-time education and the regular day programs at public institutions is even more closely related to the type of institutions than it is among the privates, although there are anomalies here too. The University of Massachusetts is a good case in point. Its Amherst campus has a range of continuing education programs as well as a positive policy for part-time study options. The Boston campus, on the other hand, does not have a continuing education program per se by intent. Rather University of Massachusetts - Boston's policy is to increasingly operate on an extended day and enroll more part-time students in its regular full-time program.

The State College System and Regional Community Colleges offer somewhat more consistent pictures because the degree of segmental control over continuing education is higher; local conditions are less the determining factors as to whether continuing and part-time studies may or may not exist.

Even where local conditions presently are conclusive, in the long run segmental and area coordination may lessen the differences. Two examples are cases in point. Lowell State College has part-time enrollments but no continuing education program. Lowell Technological Institute has both a Division of Evening Studies and a Division of Continuing Education which, in effect, coordinate part-time study. Some rationalization of these different institutional policies will no doubt come if the proposed merger of these two schools takes place.

Newton Junior College and Quincy Junior College, both municipal institutions, both encourage part-time enrollment although Quincy's extensive continuing education program considerably outshines its day program and Newton's day and evening offerings have just the reverse characteristics.

Other Administrative Mixes

In addition to the continuing education/part-time mix, other significant features of continuing education's dependence upon and involvement with the sponsoring institution exist and are important. A few of them are identified and discussed below.

--At the State Colleges, in terms of program and course offerings, there is a heavy emphasis on teacher education at the graduate level. Directors of continuing education are also in charge of graduate studies, which focus on courses leading to the M.Ed. The historical reason for this is that continuing studies was the only way the State colleges could continue graduate programs, which they were otherwise prohibited from doing by restrictive legislation. They were best equipped to begin program development. With the dampers on doctoral programs and teacher education greater now than even a few years ago, because much of the continuing education content in State college programs is skewed toward graduate teacher education, the State colleges may find it difficult to respond with much flexibility to area and client needs in other fields. There are signs to the contrary, however, in the growth plans of the State colleges continuing education programs.

--At the community colleges and some small private colleges, through a combination of operational philosophy and financial necessity, many colleges encourage a close working relation between continuing education and community service. Some, notably the community colleges, center their noncredit courses, institutes, programs, and the like in the service area, while their academic programs are bound in continuing education, both types being in an Evening Division or a Division of Continuing Education and Community Service. Others, found notably among two and four year privates, define continuing education as a mix of an extension of the day division and noncredit service courses of the most innovative and experiential kind. The challenging, controversial, experimental or innovative types of learning (content and mode) are noncredit service courses and programs, safe from faculty scrutiny and likely rejection. The traditional day offerings offered in the evening, part-time, remain under day faculty control.

Status of the Faculty

College administrations and faculties generally regard the continuing education program as ancillary to the regular "day" program. This is especially true when the program is small and becomes less true for large programs having college status within a university. Regular full-time faculty traditionally regard extension courses simply as regular departmental courses meeting as night classes; hence, the curriculum and instruction of extension programs are a function of the academic departments and their inclinations and abilities to offer night courses. This traditional attitude is still the dominant one and constitutes one of the most serious problems continuing education administrators have to face. Faculty members usually regard "teaching a night course" primarily as moonlighting activity for extra salary. Inasmuch as the academic dean and departmental chairman have determined the courses to be taught on the basis of probable demand , the chairman matches the class to be taught with the instructor most eager to teach an extra class (or most "deserving" of the financial opportunity). Teaching an overload course to the individual instructor, of course, is the result of several kinds of motivations. Some faculty find personal and professional satisfaction regardless of the extra dollars; other faculty, in very different kinds of situations, have been drafted "to fill a gap" and still others are interested primarily in the salary supplement. The "faculty moonlighting effect," while not universal, is nonetheless the chief motivation of faculty members who teach in continuing education programs, as perceived by continuing education directors and directors of employer-based education programs (compare Section II.L.).

For curricular, instructional, and staff reasons, continuing education education directors are moving away from these traditional patterns and, whenever feasible, recruiting part-time instructors to staff liberal arts courses. In-house pressures against this trend are enormous, however, because of the current "bear" market for conventionally trained college faculty and because faculty want to protect their moonlighting income supplement opportunities. Continuing education directors report much more positive results in recruiting part-timers to teach occupational and career courses. They also report a greater commitment to teaching and a higher student responsiveness to nonacademic faculty. A similar set of results is reported for adjunct faculty (qualified persons from the professions, government, business, and industry who teach courses or fill a special advisory capacity within a particular continuing education program.)

While notable success has been achieved with adjunct faculty in programs as diverse as Northeastern University's University College to the off campus Raytheon/Fitchburg State program, and while the "non-traditional education" reformers rationally generally encourage use of adjunct faculty, day college faculties tend to strongly resist such "invasion of their turf." For example, in many institutions day college faculty have first choice of any continuing education teaching opportunities, even to the extent that such a provision is written into the faculty union contract at some public campuses.

Nontraditional Studies

One of the current problems of academic administration is how to mount nontraditional studies. Should it be done within the existing academic departments, within multidisciplinary units of the institution, or within the continuing education division. There are many existing examples of the three options in Massachusetts, each with its own advantages, disadvantages, strengths and weaknesses (See Section II.M. for a more general picture.) By and large, nontraditional study projects and programs -- as options to the regular academic fare -- are to be found among regular academic departmental offerings (perhaps coordinated or supervised by a dean or director if they are interdepartmental) or as special programs reporting directly to the chief academic officer or president. Two of the Mass. State College System in "Open College" pilot programs, those at Salem and Bridgewater, are of this type. The other two "open colleges," those at Fitchburg and Framingham, are administered through the Continuing Education Divisions which permits not only a greater flexibility in determining program content but in enrolling heterogeneous clienteles, recruiting adjunct faculty, operating off-campus sites, and obtaining special funding. Because of this greater apparent capability to innovate, most of the state institutions' external degrees are administered by the Divisions of Continuing Education (DCE's). DCE-administered nontraditional studies programs are by no means the most educationally "progressive" within the State, however. Special programs for full-time students, leading to regular baccalaureate degrees, such as the UWW and University Year for ACTION programs in Boston and Amherst, offer far less structured and more experientially oriented learning alternatives for students than do public or private continuing education programs.

The reasons for many continuing education programs progressive administration and management characteristics may be their entrepreneurial role vis a vis the institution and the surrounding community. Their relatively conservative stance on questions of program content and experiential learning may stem from a historical background of "extension education" which was both highly structured and academically conventional. This handicap will have to be recognized and overcome if the DCE's are to support nontraditional programs of exceptional quality as well as the ability to develop and manage them with skill.

Common Administrative and Management Problems

Supplementary to this section are tables ("Administration of Continuing Education by Title of Office") providing a profile of the numbers of programs headed by deans or directors and a commentary on the significance of the findings. Given the importance of continuing education to the 73 institutions surveyed,, a major conclusion to be drawn from this evidence would be that administrations and governing boards should recognize this importance formally by making continuing education administrators full-time, regularly appointed deans reporting directly to the president. This formal recognition would have both real and symbolic consequences. Basic day-to-day continuing education operations including questions involving costs and pricing, course and program quality control, and program accessibility would indicate the need for regular full-time deans.

Financing and pricing issues are discussed elsewhere in this study. It is sufficient here to emphasize that costs and charges --market considerations--are now the first considerations necessary to beginning, evaluating, or terminating an instructional activity in continuing education. Accessibility and quality are decidedly second and third in order of importance.1 Program "accessibility" includes such issues as course content, site selection, and scheduling, special admissions arrangements, tuition prices, remedial and counseling services, and special credit arrangements. After cost questions have been resolved, special arrangements or special policies to provide for "accessibility" beyond already approved continuing education division practices must be cleared with the academic dean if academic policy is involved, with the administrative dean if support services are required, or in unusually important cases directly by the president. In continuing education, approval of new credit courses usually rests with departments and/or divisions and the faculty academic standards or curriculum committees. Presidential or faculty senate approval for new programs is required.

Given these financial and administrative constraints, it is not surprising that "educational quality" is perceived by directors of continuing education in extrinsic rather than intrinsic terms. Thus, as Kendrick[1] reports, directors perceive "basic educational standards" as grades, attendance, testing results, transferability of courses, and resulting job placement. The primary determinant of quality is the instructor, whether regular faculty or adjunct. As guarantees of quality control, directors rely upon the oversight of academic departments and the various faculty committees; relevance to student's needs is "assured" with the use of "good teachers." The intrinsics of educational quality thus are left to the workings of continuing education administrative mechanisms, with the division acting the part of a broker. The "three interacting demands on continuing education" -- self-support, accessibility, and quality -- are constantly juggled by directors to provide an optimal balance. When one demand is missing, as Kendrick sees it, imbalance occurs. (The three possible "dangers" are: poor quality, elitism, and bankruptcy.)

The Kendrick Study also reports some preliminary findings of the directors' concern. These concerns, by priority rankings, are (1) "staying in the black" with a particular course or program; (2) continuing education clients should get more recognition and acceptance as college students; (3) state and federal funding is necessary to underwrite some of the costs of continuing education to students and the institutions; e.g., tuition should be on a parity with regular tuition, and continuing education students should be eligible for the same services as regular students; directors do not wish "full funding" like day public college programs lest they lose some of their autonomy and flexibility; and (4) continuing education divisions should be able to give people what they need when they want it at a cost they can afford. Spin-offs from these concerns, the directors' day-to-day worries as entrepreneurial managers, are such questions as: what is the minimum class size?, under what circumstances can a course be run at a loss?, in what sense is a course undertaken as an "investment"?, when may a course be used to pay for other courses?

Issues in Administration and Management

This review of the regular (day) and continuing education (evening) programs reveals a variety of administrative characteristics and problems. Common characteristics and problems are associated with the size and purpose of the parent institution. Characteristics are not uniformly determined by segmental affiliation, if public, or by whether the control is public or private. The exceptions are noted and discussed. Continuing education divisions tend toward "progressive" management practices and toward a "conservative" educational philosophy, for reasons of their entrepreneurial status and a historical experience as extension programs. Their nontraditional mechanisms are forward-looking (where they exist), their program content is conventional. Dependence upon the regular academic program for academic policy oversight and faculty staffing is an inhibiting influence upon continuing education and is used by administrations and faculties for exploitative purposes. Increasingly, career education and work-study options, and the use of adjunct and part-time faculty, point to solutions to the problem. The "demands" of self-support, accessibility, and quality produce strengths and weaknesses as discussed below.

The findings and conclusions concerning the administration and management of continuing education programs may point to one of two future alternatives which might solve existing problems and build on present strengths. One alternative is to integrate the divisions of continuing education with the regular full time academic programs. By charging chairmen and deans with making their entire offerings comparably as flexible and accessible, many of the advantages of the continuing education division could be absorbed. Much of the duplication inherent in a quasi dual-system might be avoided. Tuition differentials would disappear. All students would be provided with the same services. Faculty moonlighting would be eliminated, at least in the sense of teaching extra hours for extra pay. These benefits of integration would accrue to institutions only if they were capable of making some basic transformations, however. Present evidence indicates that they would not change and, in fact, would be most likely to co-opt continuing education sufficiently so that its uniqueness would disappear entirely and the regular programs change not at all.

The second alternative is to strengthen the DCE's present semi-independent status by making them fiscally, administratively, and academically autonomous. They could then more fully take advantage of their entrepreneurial status. By building their own educational program in conjunction with the regular program, as well as with other continuing education operations in a given area, a more mature relation might result between co-equal partners. It thus can be argued that institutions, their full-time academic programs, and their student clienteles would benefit with the creation of strengthened and independent continuing education programs.

---

[1] See John H. Kendrick (Director of Continuing Education, Middlesex Community College). Influences upon Administrators' Capacities for Self-Determination in the Divisions of Continuing Education in Massachusetts Community Colleges: A Dissertation Proposal Submitted to the Faculty of Boston University School of Education. Boston, May 1973. University Consultants, Inc., appreciates the use of material continaed in this proposal and the several valuable discussions UCI staff has been able to have with its author. While Kendrick's data pertains specifically to Mass. Community College directors of continuing education, there are good reasons to believe that they are applicable to continuing education in the private sector and other public segments as well.

II.I.1. Table: ADMINISTRATION OF CONTINUING EDUCATION BY TITLE OF OFFICE

REGION: WESTERN

NSTITUTION	DIRECTOR	DEAN
Public		
erkshire Community College	Director of Continuing Education	
Greenfield C. C.	Director of Continuing Education	
Holyoke C. C.	Director of Continuing Education	
North Adams State College	Director of Graduate & Continuing Studies (Associate Director of Continuing Studies)	
U. Mass./Amherst	Director of Continuing Education	
Springfield Tech.	Director of Continuing Education Director of Evening Division	
Westfield State College	(Associate Director of Continuing Education)	Dean of Graduate & Continuing Studies
Private		
American International College		Dean of the Evening College & Summer Division Dean of Continuing Education Extension Program
Amherst College	(no Continuing Education program)	
Bay Path Jr. College	(no Continuing Education program)	
College of Our Lady of the	(no Continuing Education program)	
Mount Holyoke College	(no Continuing Education program)	
Smith College	(no Continuing Education program)	
Western New England College		Dean of Evening Division & Summer Session
Williams College	(no Continuing Education program)	
Springfield College	Director of Evening College (CED discontinued June '72)	
Simon's Rock College	Director of Community Programs	

ADMINISTRATION OF CONTINUING EDUCATION
BY TITLE OF OFFICE

REGION: CENTRAL

INSTITUTION	DIRECTOR	DEAN
Public		
Fitchburg State College	Director of Continuing Education	
Framingham State College		Dean of Graduate & Continu Studies
Mt. Wachusett C. C.	Director of Community Education	
Quinsigamond C. C.	Director of Continuing Education	
U. Mass./Worcester	(no Continuing Education program)	
Worcester State College	Director of Continuing Education	
Private		
Anna Maria College for Women	(Registrar responsible for Continuing Education Program)	
Assumption College	Director of Continuing Education	
Atlantic Union College	(no Continuing Education program)	
Clark University	Director of Evening College	
College of the Holy Cross	(no Continuing Education program)	
Leicester Jr. College	(no administrator responsible for Continuing Education Prog	
Nichols College	(no Continuing Education program)	
Worcester Jr. College	Director of Continuing Education	
Worcester Polytech. Institute	Director of Continuing Education	

ADMINISTRATION OF CONTINUING EDUCATION
BY TITLE OF OFFICE

REGION: NORTHEAST

INSTITUTION	DIRECTOR	DEAN
Public		
Lowell State College	(no Continuing Education program)	
Lowell Technical Institute	Director, Division of Evening Studies Director of the Summer School Director of Continuing Education	
Middlesex C. C.	Director of Continuing Education	
North Shore C. C.		Dean of Continuing Educatio & Community Services
Northern Essex C. C.	Director of Continuing Education	
Salem State College	Director of Continuing Education	
Private		
Bradford College	(no Continuing Education program)	
Endicott College	(no Continuing Education program)	
Gordon College	(no Continuing Education program)	
Merrimack College	Director of Part-time Division & Evening Sessions	

ADMINISTRATION OF CONTINUING EDUCATION
BY TITLE OF OFFICE

REGION:SOUTHEAST

INSTITUTION	DIRECTOR	DEAN
Public		
Cape Cod Community College		Dean of Continuing Educat
Bridgewater State College	Dean of Administration & Director of the Division of Continuing Studies	
Bristol C. C.		Dean of Continuing Educat
Mass. Maritime Academy	Director of Continuing Education	
Massasoit C. C.	Director of Continuing Education	
Southeastern Mass. Univ.	Director of Continuing Studies	
Private		
Dean Jr. College	Director of Evening Division	
Wheaton College	(no Continuing Education Program)	
Stonehill College		Dean of Evening College

ADMINISTRATION OF CONTINUING EDUCATION BY TITLE OF OFFICE

REGION: BOSTON

INSTITUTION	DIRECTOR	DEAN
Public		
Boston State College	Director of Continuing Studies	Dean, Evening Undergraduate College
Mass. Bay C. C.	Director of Evening College	
Mass. College of Art	Director of Continuing Education	
U. Mass./Boston	(no Continuing Education program)	
Bunker Hill C. C.	(opens September 1973)	
Roxbury C. C.	(opens September 1973)	
Quincy Jr. College (Municipal)		Dean of Continuing Educatio
Newton Jr. College (Municipal)	(administered by Dean of the College)	
Private		
Babson		Dean, School of Continuing Education
Bentley	Director, Center for Continuing Education	Associate Dean, Evening Division & Summer School
Boston College		Dean of Evening College of Arts, Sciences, Business Administration
Boston University		Dean, Metropolitan College
Brandeis University	Director of Adult Education	
Eastern Nazarene	(no Continuing Education program)	
Emerson College	(no Continuing Education program)	
Emmanuel College	(Registrar)	
Garland	(Registrar & Assistant Dean of the Faculty)	
Grahm Jr. College	(no Continuing Education program)	
Harvard University	Director of University Extension	
Hebrew College	(administered by Dean of the College)	
Lasell Jr. College	(no Continuing Education program)	
Lesley College		Dean of Graduate Studies ar Continuing Education

ADMINISTRATION OF CONTINUING EDUCATION BY TITLE OF OFFICE

REGION: BOSTON

INSTITUTION	DIRECTOR	DEAN
Mt. Ida College	(no Continuing Education program)	
M.I.T.	(no Continuing Education program)	
Newton College	(Coordinator of Continuing Studies Program)	
Northeastern University		Dean of Continuing Educat Dean, University College
Pine Manor Jr. College	Director, Open College	
Radcliffe College		Dean, Radcliffe Institute
Regis College	Director of Continuing Education	
Simmons College	Director of Division of Continuing Education	
Suffolk University		Associate Dean, Evening Division
Tufts University		Dean, College of Special Studies Dean, Jackson College
Wellesley College	Director of Continuing Education	
Wentworth Institute	(Evening School Advisor)	
Wheelock College	Director of the Associate in Science Degree Program	
Boston Architectural Center/ School of Architecture	(Chairman, Continuing Education Committee)	
Franklin Institute of Boston		Dean of the Evening Schoo
School of the Museum of Fine Arts	Director of Evening Classes	
Curry College	Director, Continuing Education	
Bryant-Stratton School of Commerce (proprietary)	Director, Division of Continuing Education	
Burdett College (proprietary)	Director of Continuing Education and Placement	
Chamberlayne Jr. College	Director of Evening Division	
New England Conservatory of Music	Director of Extension Division	

BEST COPY AVAILABLE

J. Educational Technology

DISCUSSION. II-495
Access II-495
Public Television Access II-496
Television and Radio Commercial Resources and Accessibility. II-498
Use of Existing Programs for Education II-498
Radio Resources and Accessibility. II-499
Geographic Service Areas II-500
State and Regional Networks. II-500
Cable Television II-502
Video and Audio Tape Exchange. II-503

1. Inventory of Media Facilities in Massachusetts Institutions of Higher Education II-505
Table: Inventory of Television Studio Facilities in Massachusetts Institutions of Higher Education. II-506
Table: Inventory of Television Recording Facilities in Massachusetts Institutions of Higher Education. II-513

2. Cable TV Locations in Massachusetts. II-519

DISCUSSION OF EDUCATIONAL TECHNOLOGY

Educational technology includes films, television, computers, dial access retrieval systems, cassettes, and programmed learning. To understand and assess its potential use in Massachusetts continuing and part-time education, exemplary programs, existing facilities, and available equipment were surveyed across the State, and people involved in the field of educational technology were interviewed. These discussions are presented from the perspective of communications technology viewed as an educational resource.

Technology should not be viewed as the answer to educational problems. Educational technology in the next five to ten years cannot revolutionize continuing and part-time education in the Commonwealth. It is an agent available to policymakers and curriculum designers which can provide flexible access to education, but can serve only a limited function in meeting the immediate demands for access to part-time and continuing education.

Educational technology has great potential if enough time, money, and attention is devoted to its development; but this is unlikely in Massachusetts in the near future. To be maximally effective in Massachusetts, technology must be supported in three ways: large resources in time, money and manpower for development, distribution and production; a large population for distribution; and a desire on the part of educational institutions to cooperate and share in the costs, organization, development and dissemination needed to employ technology regionally and statewide. Furthermore a knowledge of how to apply various media and of how to integrate that media into the statewide educational scheme has not been evident in Massachusetts.

In this context, possibilities will be discussed for maximal use of educational technology.

Access

The primary contribution which communications technology can make to continuing and part-time education is to increase access to programs. Many currently excluded groups can be drawn into continuing education if access is facilitated. Adults in general have much interest in learning, but may not want to or be able to focus time and energy on attending classes on a regular basis.

An adult's desire to learn manifests itself many times during the year--not just at the beginning of a school term. The time this kind of person has available varies from week to week and month to month. This person reduces his or her learning activity after he or she has acquired the knowledge or skill desired, and this may be at the end of two days or twenty weeks. The adult learner may already possess certain aspects of the knowledge he or she seeks to acquire, finding some instruction redundant and some too far advanced. In a day to day routine such a person uses radio and television as prime sources of new information. In general, this kind of student is not totally receptive to instruction which is almost entirely verbal. A new concept of access is required to meet his or her needs. Disadvantaged groups without public transportation, the elderly confined to homes, women afraid to come into the city at night, prisoners and other institutionalized groups cannot easily attend formal classes. Access for these groups is a major barrier to learning.

Adult and continuing education programs can make instruction available to the learner, wherever he or she may be, at whatever time this person requires, in the medium or media which best suit his or her purposes. To reach these objectives, instruction must be designed to permit multiple points of entry, self-instruction using modular instructional units, and opportunities for immediate feedback. The creative application of technology to the teaching-learning process can aid in mass access to learning.

Sophisticated technology such as television, radio, computers and multi-purpose telecommunicators' grids cannot be successfully exploited without centralization of resources and centralized control. Within the State, few universities share resources or programs. Money now being spent on programs and facilities would be more effectively invested in regional resource centers. Supportive regional communications resource centers could provide schools with a core from which programs would be produced, researched, developed, disseminated throughout the region, and distributed to an interested public.

Sufficient mass media resources exist in the State to transmit and distribute part-time and continuing education materials to large populations of consumers (See Table). If universities would cooperate and reciprocate in management, development and implementation, then numerous technological resources could be directly enlisted in short-range plans for part-time and continuing education efforts.

Public Television Access

In Massachusetts, there are three public television stations, all operated by and licensed to the WGBH Educational Foundation. In Boston and surrounding areas there is WGBH-TV Channel 2 and WGBX-TV Channel 44. WGBH is a VHF station, and WGBX a UHF station. WGBY Channel 57 operates (for the Western part of the State) in Springfield.

The WGBH Educational Foundation's contribution to educational pursuits in the State is well known. The Foundation broadcasts instructional television programming to elementary and secondary schools during the day through the administrative authority of the state, and for some years has been broadcasting continuing education courses in the late afternoon. The courses are in the science fields and targeted for continuing education students who study at home.

WGBY, Channel 27 in Springfield is a new station. It has facilities for simulcasting with WGBH Ch. 2. Any programs aired over Ch. 2 can be fed to Ch. 27 in Springfield. Channel 27 also has studios available. The facilities are limited, but quite adequate for lectures, seminars, discussions and other non-complicated television productions.

With the capabilities of the WGBH Educational Foundation, there is now a statewide television link that is used for the broadcasting and production of television programming for school and home consumption. It is not yet being used in any concerted manner to assist higher education in opening up access to part-time and continuing education clientele.

Channel 44 is available for use most of the day and evening. The WGBH Educational Foundation would welcome opportunities to provide transmission resources. Arrangements could be made to purchase transmission time. Then new programs, or existing programs, could be aired to clientele in their homes, their schools, or at their places of business. Currently, Channel 44 is not in use during the day, and therefore, available for instructional programming.

The UHF Channel 44 Grade A coverage area, (the area of maximum signal penetration), covers Eastern Massachusetts as far as Worcester. Its viewing area is limited to the greater Boston region, and reception depends on the availability of UHF television receivers. Channel 44 could serve many needs in the Boston region by transmitting programming and information.

There is little chance that WGBH Ch. 2 will broadcast college course material beyond what is now being aired without radical policy changes. In fact, it is our understanding that the continuing education course material now being aired may soon be eliminated. The station hasn't any available air time unless it changes its normal evening program material, or eliminates daily broadcasts to elementary and secondary schools and replaces this time with college course work. Because its prime programming policy is to broadcast evening public television to homes, WGBH Ch. 2 will not change its evening programming to instructional course material.

Because of the poor reception and impact of school broadcast, and because of State-determined restrictions on primary and secondary education, only a small audience is benefiting from instructional television. A more efficient use of money and production time would be to eliminate all elementary and secondary school broadcasts from open air Channel 2 and use the hours of time (6 AM to 3PM) for transmitting such material to part-time and continuing higher education participants.

Arrangements similar to the one that now exists between the State and WGBH could be set up. In such a case, institutions could pay a fee to become active participants. Ideally, the State would finance the operation and production costs. Various institutions would then work collectively to acquire additional money from foundations and the federal government. Additionally, students could pay a fee for each course in which they enrolled.

Under such an arrangement, broadcast to elementary and secondary schools would be eliminated. It would be necessary, therefore, to provide the elementary and secondary schools with a means of receiving television programs. The State leases time and facilities from Channel 2 for production and transmission purposes. That same money could be used to provide schools with video tapes of programs and for the acquisition of videotape equipment.

This change from broadcast television to a videotape distribution operation would be far more cost-effective, would eliminate the repetition of programs, and would guarantee that only users would receive the course material. It would also give choice of use to the teachers.

Freeing the daily air time on Channel 2 would provide 8 to 10 hours that could be used to broadcast programs determined from caref market analysis and audience surveys to be of greatest interest to the large population of people who wish to pursue their education.

Television and Radio Commercial Resources and Accesibility

In the State little use is being made of commercial television and radio to assist in providing access to educational materials. Since commercial broadcasting must compete for audiences, stations are not prepared to produce educational programs for college course work except where the programs are least likely to endanger ratings. However, cooperative strategies and policy agreements by the educational institutions could make commercial television a more accessible resource. All of these commercial stations publically proclaim a responsibility to the community. All schedule educational programs. The programs aired are chosen by the station management and are mostly intended for young audiences. These programs are usually on in the very early mornings during the week and on Saturday and Sunday. No commercial station airs programs for college level course credit instruction. Yet this would appear to be a logical way to partially meet FCC licensing requirements for service.

Use of Existing Programs for Education

Commercial television ought to be exploited by the education establishment. It may be possible to use programs now on the air and those intended for future airing as course material to be viewed for credit.

There are programs currently on the air that have promising possibilities as acceptable course material. Examples include community affairs shows, and information shows. Overall, there is probably content material in certain programs that would satisfy course work in specific areas. Educators should work with commercial stations to advise and suggest program ideas or content areas, and research to determine the feasibility of this idea.

The commercial stations might also be induced to cooperate in providing production personnel and facilities. Obviously, such an arrangement would be limited to rare occasions. Yet, it has been done. One example is WBZ-TV's cooperation with the State Department of Education in producing and broadcasting a television series on English as a second language.

Radio Resources and Accessibility

Radio, as an educational tool, has largely been ignored in this State; yet, it is a cost-effective means for offering instruction to homes and environments away from campus and institutions. Lectures, discussions, and exams could be produced cheaply and quickly and transmitted to select target populations using the FCC's side channel authorization through existing university facilities to disseminate particular course material, e.g.:

a)Universities could record the lectures and lecture/discussion classes for later transmission over a sideband channel.

b)Stations could program discussion sessions with telephone link-up so that independent study participants could discuss course content with the professor.

c)Universities could reciprocate and trade each other's programming.

d)Participants might be required to purchase side signal converters as a part of their admission fee, or a collection of universities could cooperate in purchasing bulk amounts of converters to be distributed to individuals, community centers, places of employment.

e)Regional production and transmission centers could be set-up to coordinate the instructional radio efforts.

Under this scheme radio would broadcast the same instruction received by those students who attend lectures and seminars, to reach a large number of people outside the campus environment. Elaborate, quality productions requiring time, talent, money and the difficult procedures of radio production are not suggested. Beginning with radio as a basic tool to record and transmit information--lectures and discussions--that are taking place in the universities realistic and short-range use of existing technologies can be made. Homes, classrooms and places of business could receive broadcast programs and study or exam materials. The successful adoption of radio as an instructional tool could provide regions in the State with a central audio source to transmit and receive instruction and information.

FM radio is allowed by the Federal Communications Commission to transmit information on a side channel that is best understood in terms of a closed circuit radio. Commercial stations, such as WCRB and WROR in the Boston area feed muzak to participating organizations through FM side channels. The subscribing organization can only receive muzak that is being fed from the FM station. Those not participating are not able to receive information.

Wisconsin University School of the Air currently transmits educational material to a selected target population, including adult and continuing education programs and programs transmitted daily to the blind. KSJR in Minnesota has also successfully adopted radio as a media tool to transmit instructional material. To receive the programs originating from the FM transmission source, listeners must have receivers with a built-in side-signal or a converter--much like a UHF television adapter--that fits onto their radio. The cost for a converter is about $25.00.

Many of the universities in Massachusetts have FM radio licenses and operate FM radio stations that could adapt for transmission on side-signal. Harvard, MIT, Tufts, Northeastern, U./Mass. - Amherst, Boston University and others all have operating FM stations easily adaptable to side channels transmission, as does WGBH-TV. Side band programming is separate from regular programming. Naturally, money would be required to make the adaptation, but costs for the operation and transmission of radio information are very low in comparison with other costs of learning. Assuming the universities would cooperate in the distribution and production of radio instruction, side-channel radio could be used in part-time and continuing education programs to provide greater access to learning to large numbers of clientele.

Geographic Service Areas

In the universities, two-year colleges, proprietary institutions and high schools throughout the State, programs are being produced and course materials recorded for dissemination to students within a particular institution. In only a very few instances is there evidence of any reciprocal or cooperative use of available programming or hardware. The result is costly duplication of facilities, program development and audience.

If the State is divided into geographic service areas, it is possible for technological resources and programming to be shared. Each area has sufficient hardware to create a communications network from which programming can be transmitted and distributed. Each area also has a certain amount of software programming that could be shared by institutions and thereby provide study materials for part-time and continuing education clientele.

State and Regional Networks

Surprisingly communications resource networks are attainable without any large capital outlay. The technology is currently available to develop regional and statewide networks.

A regional television network in the Boston area could be easily and inexpensively developed with the necessary cooperation, coordination and commitment by the educational institutions in that region. For example, Northeastern University and the Archdiocese of Boston are now equipped with Instructional Television Fixed Services (ITFS) facilities. ITFS is a closed circuit television system that transmits via a series of channels in the range of frequencies around 2500 megahertz. ITFS is a valuable service and an alternative to other forms of signal delivery, such as telephone company cable or Community Antenna Television System (CATV). The ITFS channels allocated by the FCC to Northeastern University and the Boston Archdiocese can transmit programming and course material to classrooms or schools equipped with inexpensive microwave and conversion equipment.

The Boston Archdiocese, through the Boston Catholic Television Center, now transmits institutional television programs on two channels to approximately 250 member schools throughout Eastern Massachusetts. There is no limit to the number of buildings or institutions that could receive the Archdiocese's signal. The system is currently broadcasting from 8:30 AM to 1:00 PM with elementary and secondary programming. After 1 PM, the facilities are available for use and at present there are no plans for filling that time with programming but a desire on the part of the Archdiocese to do so.

Northeastern University has a sophisticated communications system that includes an ITFS channel. At present, its use is minimal, but like the Archdiocese, the Channel is available for cooperative ventures.

Those responsible for the management of these ITFS systems are anxious to share their resource and cooperate with all interested institutions in maximizing the use of their technology. The Boston Catholic Television Center and Northeastern University both have antennae on the Prudential Building in Boston. Northeastern and BCTV already have the capacity for interconnecting with each other, which means they can share each other's transmission facilities.

A down converter and a microwave dish can be installed on any structure for about $1500.00, so it is possible for any institution within line of sight of the Prudential Building to link up with Northeastern and BCTV to receive live or recorded transmission. Also, WGBH-TV Channel 2 and WGBX-TV Channel 44 are capable of both receiving and transmitting via the ITFS facility.

In addition, the ITFS facilities could be extended as far as New Hampshire and Fall River with only slight additions to Boston Catholic's transmission system. A closed circuit network would thus provide outstanding opportunities for interinstitutional cooperation and coordination of part-time and continuing education materials.

Both Northeastern and BCTV are ideal transmission sources. They are also ideal production sources. Northeastern's Office of Educational Resources is a sophisticated production center for multi-media or single medium productions, and is now in the process of developing systems programming of course material. The process includes overall development and design of both content and presentation, using the media that is most effective for any particular course.

The Boston Catholic Television Center is an excellent production facility with knowledgeable staff and outstanding complementary resources that are shared with the Education Development Center. The Education Development Center is a curriculum laboratory with exceptional staff and facilities for curriculum development, and for television, film and audio production. EDC is also linked up with Boston Catholic Television's ITFS system and with WGBH-TV via a cable link.

In short, a concerted effort to develop existing ITFS facilities would provide higher education institutions with a closed television network that could be used to transmit course material to points throughout the state, thereby providing mass learning to on-campus clientele.

A pilot project would be instrumental in initiating interinstitutional cooperation, and in confirming the wisdom of resource sharing. At the same time, the pilot project could also test applicability and usefulness of the ITFS system mentioned previously. Northeastern and Boston Catholic Television could cooperate together to record and transfit video portions of the pilot, to MIT, Boston University, Harvard, U./Mass.-Boston, and Boston State. Before the project, those institutions would decide how to use and evaluate the programs.

Cable Television

Of all the new media available, cable television is the most difficult to apply to education. Cable is not well-developed in Massachusetts and new state regulations may be passed by the legislature this year. Any large-scale use of cable in higher education would involve concerted long-range efforts to work out arrangements with the various cable operations in the state (See II.J.3). It is unlikely that in the short-term such arrangements could be made.

However, there are some immediate opportunities in Western Massachusetts for a regional cable network. Cable companies such as Pioneer Valley pick up the commercial stations in surrounding areas and feed that programming to subscribers. The cable companies, in almost all cases, will provide an educational channel to the communities subscribing to that cable. They will also lay the cable necessary to link an educational institution to the cable system.

Video and Audio Tape Exchange

Many universities produce video or audio tapes that are then transmitted internally to classes. These individual programs and projects around the state utilize technology; there is interest and determination to employ communications technology to assist in teaching and learning. Still, because of inadequate financing and no centralized planning, accomplishments on the part of individual institutions fall short of the ideal.

To avoid duplications of effort arrangements must be initiated among various institutions to pool resources, talent and budgets. Reciprocal tape exchange arrangements should be made within each geographic service area.

Some brands of videotape equipment are compatible with one another--meaning a tape recorded on one brand machine can be played back on another brand, but some are incompatible. In the past few years, the helical scan half-inch videotape equipment has been standardized. Most institutions in the state use equipment that is compatible in format and therefore software can be exchanged and shared among the institutions.

A large majority of schools around the State have videotape equipment that will record and playback on any television set which is available for faculty and student use to supplement and reinforce teaching and learning (See Tables). Some schools have produced or acquired programs of instruction that are broadcast over closed curcuit television or radio, or distributed to classrooms with the necessary recording and playback equipment. For example, Northeastern's Educational Resource Center now provides a multi-media learning course in fundamental psychology, and Bridgewater State College's Division of Continuing Education offers videotape lectures and discussions in Contemporary American Civilization. These courses combine video tapes, audio tapes, reading and individual contact with instructors. Instructors videotape a lecture, discussion or illustrations for each particular topic of the course. Students view the tape in the Instructional Media Center. At the end of the course, the student will take an examination to be used in final evaluation of his work.

Worcester Polytechnic has closed circuit audio and video facilities, but their use is limited. Through their school of Industrial Management and in cooperation with RCA, they are experimenting with a course on marketing management for RCA's personnel. WPI does however make considerable use of videotape as a direct faculty aid. Faculty in all disciplines make short tapes covering specific topics in their courses so students can review difficult material or learn in greater depth than lecture time on a given topic may allow.

Salem State College has instituted an Open College program which started in 1972. The Open College is a combination of independent study, taped television, and conferences and seminars. The Open College concept at Salem State is patterned in part after the Open University in

Britain. In fact, the taped material used is the British Open University's "Integrated Approach to Philosophy, History, Literature, Art and Music." The College is in the process of developing additional units of instruction for the Open College. Developmental work is in process at the departmental levels.

Dean Junior College uses videotape, cassettes, audio tapes and films in offering part-time students course work in Law Enforcement, Speech and general course offerings. The College intends to begin an open college experiment in the future. Suffolk University provides a media course for teachers using closed circuit TV. The University of Massachusetts at Boston is developing an ambitious multi-media learning center that will provide course material for the university.

Dean Junior College, Babson College, Bentley College, Brandeis University, Lesley College, and Suffolk University are all participating in a course in Basic Computer Programming. Suffolk also cooperates with Babson and MIT to teach the uses of the computer as a research tool in chemistry and physics. These efforts represent some of the few instances of interinstitutional cooperation in the State through the use of educational technology.

II.J.1. Inventory of Media Facilities in Massachusetts Institutions of Higher Education

The following data details the available television technology resources by geographic service area and by individual institutions.

Table I: Inventory of Television Studio Facilities in Massachusetts Institutions of Higher Education

The data in Table I shows that most of the institutions responding to the questionnaire have video tape recording capability. Further, most of the institutions responding have 1/2" Sony equipment, which indicates that institutions within geographic service areas have the technical capability for tape exchanges and program sharing.

Table II: Inventory of Television Recording Facilities in Massachusetts Institutions of Higher Education

This table reveals that within each of the geographic service areas there is one or more television studio facility at which programming and recording can be accomplished.

BEST COPY AVAILABLE

I: INVENTORY OF TELEVISION STUDIO FACILITIES IN MASSACHUSETTS INSTITUTIONS OF HIGHER EDUCATION

WESTERN REGION

Springfield Area

	TELEVISION PRODUCTION CAPABILITY									TRANSMISSION CAPABILITY		RECEPTION CAPABILITY	
INSTITUTION	STUDIO	# CAMERAS	AUDIO EQUIP.	LIGHTING EQUIP.	PRODUCTION/TECH. PERSONNEL	VIDEO TAPE RECORDERS	VIDEO CASSETTE EQUIP.	VIDEO TAPE MONITORS	AUDIO PRODUCTION FACILITIES	OPEN CIRCUIT	CLOSED CIRCUIT	OPEN CIRCUIT	CLOSED CIRCUIT
American International College									X				
Bay Path J.C.		1	X			2		X	X			X	
College of Our Lady of the Elms					production				X				
Holyoke C.C.	X	3	X	X	work-study students part-time	2		X			on local cable company channel	X	X
Mount Holyoke		3			technical	3		X	X			X	
Springfield Tech. C.C.		4		X	technician in charge of A-V, Studio technician	5	X	X	X		Master Antenna system w/ closed circuit modulator	all local channels	Master antenna
Western New England College		3	X	X	technical, from Engineering Dept.	5		X			X	X	X
Westfield State College						3		X				X	

Pittsfield/North Adams Area

INSTITUTION	STUDIO	# CAMERAS	AUDIO EQUIP.	LIGHTING EQUIP.	PRODUCTION/TECH. PERSONNEL	VIDEO TAPE RECORDERS	VIDEO CASSETTE EQUIP.	VIDEO TAPE MONITORS	AUDIO PRODUCTION FACILITIES	OPEN CIRCUIT	CLOSED CIRCUIT	OPEN CIRCUIT	CLOSED CIRCUIT
Berkshire Christian College						1		X	X			X	cable TV on campus
Berkshire C.C.	X	3	X	X	full-time media specialist to service equipment (not for studio production)	5		X				X	
Williams College						3		X				X	

Amherst/Northampton Area

INSTITUTION	STUDIO	# CAMERAS	AUDIO EQUIP.	LIGHTING EQUIP.	PRODUCTION/TECH. PERSONNEL	VIDEO TAPE RECORDERS	VIDEO CASSETTE EQUIP.	VIDEO TAPE MONITORS	AUDIO PRODUCTION FACILITIES	OPEN CIRCUIT	CLOSED CIRCUIT	OPEN CIRCUIT	CLOSED CIRCUIT
Amherst College						3			X			X	
Greenfield C.C.	X	3	X	X	producer and media tech. students trained in TV production	4		X			cable-vision	X	cable-vision and VTR
Hampshire College	X	2	X	X	2 full-time technicians, 2 production personnel	8	X	X	X		4 channels relayed from town cable, 4 channels on-campus origination	X	via hook-in to Amherst town cable
Smith College			X		both	4		X	X			X	
U./Mass.-Amherst	X	10	X	X	both	25-30		X	X			X	

BEST COPY AVAILABLE

I: INVENTORY OF TELEVISION STUDIO FACILITIES IN MASSACHUSETTS INSTITUTIONS OF HIGHER EDUCATION

CENTRAL REGION

Worcester Area

	TELEVISION PRODUCTION CAPABILITY									TRANSMISSION CAPABILITY		RECEPTION CAPABILITY	
INSTITUTION	STUDIO	# CAMERAS	AUDIO EQUIP.	LIGHTING EQUIP.	PRODUCTION/TECH. PERSONNEL	VIDEO TAPE RECORDERS	VIDEO CASSETTE EQUIP.	VIDEO TAPE MONITORS	AUDIO PRODUCTION FACILITIES	OPEN CIRCUIT	CLOSED CIRCUIT	OPEN CIRCUIT	CLOSED CIRCUIT
nna Maria College for Women		1				1		X	X		X	X*	X
ssumption College						7		X				X	
Central New England Colleges --Worcester J.C.													
--Central New England College**									X				
lark University	X	4	X	X	technical	4		X	X		2 Conrac demodulators that can be used to carry & distribute RF signal to one or more monitors or to receive off-air signals	X	X
ollege of the Holy Cross									X				
eicester J.C.													
uinsigamond C.C.	**		X	X	A-V technician	4		X	X		one bldg.	X	X
orcester Polytechnic Institute	X	5	X	X	1 full-time student helper	28	X	X			X	X	X
orcester State College	X	4	X	X	staff member	8		X	X		COAX to all classrooms	X	distribution taps in classroom

* not installed permanently

** Central New England College itself has virtually no equipment, but has engaged the resources of private sources. The College has a videotape capability through Videcon Associates in Worcester and can depend upon TelePrompter to aid students in television technology.

** theater with stage and lighting systems that can be used for TV production on limited basis.

Fitchburg/Gardner Area

itchburg State College	X	3	X	X		5	X	X	X		McKay Training School	X	X
t. Wachusett C.C.	X	3	X	X	1 electronics technician	3		X	X		C.A.T.V.	X	C.A.T.V.

Framingham Area

Framingham State College	X	2+	X	X	1 full-time technician, student helpers	5	X	X	X			X	

BEST COPY AVAILABLE

I: INVENTORY OF TELEVISION STUDIO FACILITIES IN MASSACHUSETTS INSTITUTIONS OF HIGHER EDUCATION

NORTHEAST REGION

Lynn/Salem Area

INSTITUTION	TELEVISION PRODUCTION CAPABILITY									TRANSMISSION CAPABILITY		RECEPTION CAPABILITY	
	STUDIO	# CAMERAS	AUDIO EQUIP.	LIGHTING EQUIP.	PRODUCTION/TECH. PERSONNEL	VIDEO TAPE RECORDERS	VIDEO CASSETTE EQUIP.	VIDEO TAPE MONITORS	AUDIO PRODUCTION FACILITIES	OPEN CIRCUIT	CLOSED CIRCUIT	OPEN CIRCUIT	CLOSED CIRCUIT
Endicott J.C.	X	3	X	X	production			X	X			X	
Gordon College						4		X	X			X	
North Shore C.C.		2	X	X		2		X				X	
Salem State College	X	4	X	X	1 director, 1 engineer, 1 media lab technician	12		X	X		3 channel CCTV all classrooms (150) cabled	all broadcast stations	X

Andover/Lowell Area

INSTITUTION	STUDIO	# CAMERAS	AUDIO EQUIP.	LIGHTING EQUIP.	PRODUCTION/TECH. PERSONNEL	VIDEO TAPE RECORDERS	VIDEO CASSETTE EQUIP.	VIDEO TAPE MONITORS	AUDIO PRODUCTION FACILITIES	TRANSMISSION OPEN CIRCUIT	TRANSMISSION CLOSED CIRCUIT	RECEPTION OPEN CIRCUIT	RECEPTION CLOSED CIRCUIT
Lowell State College	X	2	X	X				X	X		X	X	X
Lowell Tech. Inst.		2	X		Student A-V Society	2		X	X			X	
Northern Essex C.C.		7		X		2	X	X				X	

Burlington/Bedford Area

INSTITUTION	STUDIO	# CAMERAS	AUDIO EQUIP.	LIGHTING EQUIP.	PRODUCTION/TECH. PERSONNEL	VIDEO TAPE RECORDERS	VIDEO CASSETTE EQUIP.	VIDEO TAPE MONITORS	AUDIO PRODUCTION FACILITIES	TRANSMISSION OPEN CIRCUIT	TRANSMISSION CLOSED CIRCUIT	RECEPTION OPEN CIRCUIT	RECEPTION CLOSED CIRCUIT
Middlesex C.C.		2				X		X	X			X	

BEST COPY AVAILABLE

I: INVENTORY OF TELEVISION STUDIO FACILITIES IN MASSACHUSETTS INSTITUTIONS OF HIGHER EDUCATION

SOUTHEAST REGION

Brockton Area

	TELEVISION PRODUCTION CAPABILITY									TRANSMISSION CAPABILITY		RECEPTION CAPABILITY	
INSTITUTION	STUDIO	# CAMERAS	AUDIO EQUIP.	LIGHTING EQUIP.	PRODUCTION/TECH. PERSONNEL	VIDEO TAPE RECORDERS	VIDEO CASSETTE EQUIP.	VIDEO TAPE MONITORS	AUDIO PRODUCTION FACILITIES	OPEN CIRCUIT	CLOSED CIRCUIT	OPEN CIRCUIT	CLOSED CIRCUIT
Bridgewater State College	X	3	X	X	1 person part-time, 1 student	4		X	X		C.C.T.V.	TV in student union	M.A.T.V. in library
Massasoit C.C.		5	X	X	X	6		X				X	
Stonehill College						X		X			X	X	X

Fall River/New Bedford Area

	TELEVISION PRODUCTION CAPABILITY									TRANSMISSION CAPABILITY		RECEPTION CAPABILITY	
INSTITUTION	STUDIO	# CAMERAS	AUDIO EQUIP.	LIGHTING EQUIP.	PRODUCTION/TECH. PERSONNEL	VIDEO TAPE RECORDERS	VIDEO CASSETTE EQUIP.	VIDEO TAPE MONITORS	AUDIO PRODUCTION FACILITIES	OPEN CIRCUIT	CLOSED CIRCUIT	OPEN CIRCUIT	CLOSED CIRCUIT
Bristol C.C.	X	2	X	X	one of each	6		X	X		RF - 4 in-house	UHF - 44, 36 VHF - 2,6,10, and 12	X
Southeastern Mass. Univ.	X	12	X	X	2 professional production, 2 professional , several part-time	14	X	X	X	2500 mhz transmitting station	14 channel RF C.C.	7 channels	X
Swain School of Design						1		X				X	

Falmouth/Barnstable Area

	TELEVISION PRODUCTION CAPABILITY									TRANSMISSION CAPABILITY		RECEPTION CAPABILITY	
INSTITUTION	STUDIO	# CAMERAS	AUDIO EQUIP.	LIGHTING EQUIP.	PRODUCTION/TECH. PERSONNEL	VIDEO TAPE RECORDERS	VIDEO CASSETTE EQUIP.	VIDEO TAPE MONITORS	AUDIO PRODUCTION FACILITIES	OPEN CIRCUIT	CLOSED CIRCUIT	OPEN CIRCUIT	CLOSED CIRCUIT
Cape Cod C.C.	X	2	X	X	production	2		X	X		to classrooms and student commons	X	X

BEST COPY AVAILABLE

I: INVENTORY OF TELEVISION STUDIO FACILITIES IN MASSACHUSETTS INSTITUTIONS OF HIGHER EDUCATION

BOSTON REGION

Boston Area

INSTITUTION	TELEVISION PRODUCTION CAPABILITY									TRANSMISSION CAPABILITY		RECEPTION CAPABILITY	
	STUDIO	# CAMERAS	AUDIO EQUIP.	LIGHTING EQUIP.	PRODUCTION/TECH. PERSONNEL	VIDEO TAPE RECORDERS	VIDEO CASSETTE EQUIP.	VIDEO TAPE MONITORS	AUDIO PRODUCTION FACILITIES	OPEN CIRCUIT	CLOSED CIRCUIT	OPEN CIRCUIT	CLOSED CIRCUIT
Aquinas J.C.													
Babson College		2	X		full-time Media specialist	1		X	X			X	
Bentley College		1	X	X	2 student volunteers	2		X	X			X	
Blue Hills Regional Technical School		3	X	X	1 full-time electronics technician	2		X	X		in-House; video & modulated transmission	X	M.A.T.V.
Boston College	X	6	X	X	Grad. assistants-Media	8		X	X		X	X	X
Boston Conservatory of Music													
Boston State		4			technical	4		X	X			X	
Boston University School of Public Communications	X	10	X	X	at least 1 full-time person who serves in both capacities	8		X	X		limited to 1 floor	X	X
School of Nursing	X	3	X	X	not full-time: director of School of Nursing A-V and a helper, students assist	8		X	X		2 channels in bldg.	off-the-air signals low clarity	X
School of Education		10	X	X	1 full-time technician 2 grad. assistants 1 work-study person	15	3	X	X		2 channels	X	X
Brandeis University*													
Career Academy						1		X	X			X	
Curry College		1	X	X	students on part-time basis	2		X	X			X	
Eastern Nazarene College						2		X				X	
Emerson College	X	12	X	X	Both teaching and maintenance undergrad. and grad. students who are both, in their own right, production and technical personnel.	10		X	X		on Mod. carrier C.C. audio TelcoFax WERS-FM	X	X

BEST COPY AVAILABLE

I: INVENTORY OF TELEVISION STUDIO FACILITIES IN MASSACHUSETTS INSTITUTIONS OF HIGHER EDUCATION

BOSTON REGION

Boston Area, cont'd.

INSTITUTION	TELEVISION PRODUCTION CAPABILITY					VIDEO TAPE RECORDERS	VIDEO CASSETTE EQUIP.	VIDEO TAPE MONITORS	AUDIO PRODUCTION FACILITIES	TRANSMISSION CAPABILITY		RECEPTION CAPABILITY	
	STUDIO	# CAMERAS	AUDIO EQUIP.	LIGHTING EQUIP.	PRODUCTION/TECH. PERSONNEL					OPEN CIRCUIT	CLOSED CIRCUIT	OPEN CIRCUIT	CLOSED CIRCUIT
Garland J.C.													
Grahm J.C.	X	12	X	X	3 full-time engineers 12 student engineers	11	X	X	X		RF-2 channels	G.E. receivers in all classrooms	X
Harvard University		8	X		video service supervisor telecommunications technician	7	3	X	X		HITS C.C. T.V. system between WGBH and North Yard area	X	20 Harvard sites reached by HITS
Lasell J.C.									X				
Mass. Bay C.C.		1	X	X		1		X				X	
Mass. College of Art	X	2	X	X	1 full-time TV technician	2		X					
Mass. College of Optometry						2		X				Sony CVM D20V will receive open circuit	
Mass. College of Pharmacy		3	X	X		2		X	X			X	
Mass. Institute of Technology	X	3	X	X	Prod./Director, Cameramen, Videoman, VTR Operator, TV Engineer, Technicians	17	X	X			video and RF	X	X
Mass. Radio & Electronics School								X				X	
Mount Ida J.C.		2				2		X	X		X	X	X
New England Conservatory of Music					production/technical for audio only				X		for audio only		X
Newbury J.C.		2	X			X		X				X	
Newton College						X		X				X	
Northeast Broadcasting School	X	3	X	X	both	1			X			X	
Northeastern University	X	3	X	X	1 engineer, 3 technicians	25		X	X	2500 mhz ITFS (transmitter on Prudential tower)	closed-circuit hard wire to select rooms	Boston & Burlington campuses and 360° potential within 20 mi. radius	X

BEST COPY AVAILABLE

I: INVENTORY OF TELEVISION STUDIO FACILITIES IN MASSACHUSETTS INSTITUTIONS OF HIGHER EDUCATION

BOSTON REGION

Boston Area, Cont'd.

	TELEVISION PRODUCTION CAPABILITY									TRANSMISSION CAPABILITY		RECEPTION CAPABILITY	
INSTITUTION	STUDIO	# CAMERAS	AUDIO EQUIP.	LIGHTING EQUIP.	PRODUCTION/TECH. PERSONNEL	VIDEO TAPE RECORDERS	VIDEO CASSETTE EQUIP.	VIDEO TAPE MONITORS	AUDIO PRODUCTION FACILITIES	OPEN CIRCUIT	CLOSED CIRCUIT	OPEN CIRCUIT	CLOSED CIRCUIT
Pine Manor J.C.						1	X						
Regis College		1	X			1		X	X		C.C.camera to monitor	X	X
Rets Electronics School						1		X				X	
Simmons College	X	5	X	X	production	8		X	X			local TV stations	
Suffolk University		3		X		3		X			X	Ch. 4,5, 7,2,56, 22,44	X
Tufts University	X	8	X	X	2 production/ technical	9	13	X	X		X	X	video audio RF monitors
Wellesley College					A-V director student assistants	5		X	X			X	
Wentworth Institute	X	1	X	X	part-time professor and technician	1	X	X	X			X	
Wheelock College						2		X				X	

II: INVENTORY OF TELEVISION RECORDING FACILITIES IN MASSACHUSETTS INSTITUTIONS OF HIGHER EDUCATION

WESTERN REGION

BEST COPY AVAILABLE

Springfield Area

	TELEVISION RECORDING FACILITIES									
	VIDEO TAPE RECORDERS			VIDEO CASSETTE EQUIPMENT			VIDEO TAPE MONITORS OR TV SETS		AUDIO EQUIPMENT	
INSTITUTION	NUMBER	BRAND	FORMAT	NUMBER	BRAND	FORMAT	NUMBER	BRAND	CASSETTE	REEL-TO-REEL
American International College									X	
Bay Path J.C.	2		1/2"					Concord	X	X
College of Our Lady of the Elms									yes	
Holyoke C.C.	2	Sony	1/2"					Sony G.E. - 7	X	X
Mount Holyoke College	2 1	Sony (old) Sony (new)	1/2" 1/2"				3	Sony		X
Springfield Tech. C.C.	5	Sony	1/2"		Sony - Record/ Playback			RCA	X	X
Western New England College	5	Sony	1/2"				4 5	Sony/RCA monitors Sony/RCA TV's	yes	
Westfield State College	3	Sony (2 are porta-pack)	1/2"					Sony	X	X

Pittsfield/North Adams Area

Berkshire Christian College	1	Sony	1/2"					Sony	X	
Berkshire C.C.	2 3	IUC Sony	1" 1/2"					Sony Setchell-Carlson	yes	
Williams College	2 1	Sony Sony	1/2" 1"					CVM - 112u		

Amherst/Northampton Area

Amherst College	1 1 1	Panasonic EIAJ-1 Sony G.E. (Old format)	1/2"					Sony G.E.		X
Greenfield C.C.	2 2	Sony Sony	1/2" 1"					Setchell-Carlson Sony Admiral	X	X
Hampshire College	8	Sony	1/2" 3/4" 1"		Sony VO-1600 Sony VP-1000			Sony Admiral Zenith	X	X
Smith College	4	Sony	1/2"					Setchell-Carlson Sony	yes	
U./Mass.-Amherst		varied	1/4" 1/2" 1"					varied	X	X

BEST COPY AVAILABLE

II: INVENTORY OF TELEVISION RECORDING FACILITIES IN MASSACHUSETTS INSTITUTIONS OF HIGHER EDUCATION

CENTRAL REGION

Worcester Area

	TELEVISION RECORDING FACILITIES									
	VIDEO TAPE RECORDERS			VIDEO CASSETTE EQUIPMENT			VIDEO TAPE MONITORS OR TV SETS		AUDIO EQUIPMENT	
INSTITUTION	NUMBER	BRAND	FORMAT	NUMBER	BRAND	FORMAT	NUMBER	BRAND	CASSETTE	REEL-TO-REEL
Anna Maria College for Women	1	Sony SV-300	1"					Sony 305 RU 5" monitor		X
Assumption College	3 2 1 1	Craig 64-01 Sony 3600 EIHA Panasonic 31-30 EIHA Sony Porta-pak	1/2" 1/2" 1/2"				4 4	Craig Sony	X	X
Central New England Colleges --Worcester J.C.										
--Central New England College*										
Clark University	4	Sony Panasonic	1/2"					Sony Admiral Panasonic G.E.		X
College of the Holy Cross									X	
Leicester J.C.										
Quinsigamond C.C.	4	Sony EIJ-1	1/2"					Setchell-Carlson		X
Worcester Polytechnic Inst	24 1 3	Sony EIAJ Sony Sony	1/2' 3/4' 1"		Sony U-matic			Sony G.E. Electrohome	X	
Worcester State College	5 3 1	Sony porta-pak (3400) Sony (3600) Sony (320)	1/2' 1/2' 1"				25 5	RCA Magnavox	X	X

* Central New England College itself has virtually no equipment, but has engaged the resources of private sources. The College has a videotape capability through Videcon Associates in Worcester and can depend upon TelePrompter to aid students in television technology.

Fitchburg/Gardner Area

Fitchburg State College	5	Sony EIJA	1/2' 3/4' 1"		Sony U-matic Record & Playback			RCA	X	X
Mt. Wachusett C.C.	2 1	Sony Sony	1" 1/2"					Magnavox	X	X

Framingham Area

Framingham State College	4 1	Sony Panasonic Ampex 4 porta-pak units (2 new format)	1/2" 1"	1	Panasonic	1/2"		G.E. Panasonic Sony	X	X

BEST COPY AVAILABLE

II: INVENTORY OF TELEVISION RECORDING FACILITIES IN MASSACHUSETTS INSTITUTIONS OF HIGHER EDUCATION

NORTHEAST REGION

Lynn/Salem Area

	TELEVISION RECORDING FACILITIES									
	VIDEO TAPE RECORDERS			VIDEO CASSETTE EQUIPMENT			VIDEO TAPE MONITORS OR TV SETS		AUDIO EQUIPMENT	
INSTITUTION	NUMBER	BRAND	FORMAT	NUMBER	BRAND	FORMAT	NUMBER	BRAND	CASSETTE	REEL-TO-REEL
Endicott J.C.								RCA	X	X
Gordon College	4	Sony Shibaden	1/2"					Sony Shibaden		X
North Shore C.C.	2	Sony CV2200	1/2"					RCA	X	X
Salem State College	12	Sony Ampex	1/2" 1"				100	Setchell-Carlson RCA Sylvania	X	X

Andover/Lowell Area

Lowell State College							2 1 4	Zenith Motorola Dage		X
Lowell Technical Inst.	1 1	Sony Panasonic	1/2" 1/2"					Setchell-Carlson Panasonic	X	X
Northern Essex C.C.	2	Concord (old format)	1/2"					Concord	X	

Burlington/Bedford Area

Middlesex C.C.	1	Sony	1/2"					Sony	X	X

BEST COPY AVAILABLE

II: INVENTORY OF TELEVISION RECORDING FACILITIES IN MASSACHUSETTS INSTITUTIONS OF HIGHER EDUCATION

SOUTHEAST REGION

Brockton Area

	TELEVISION RECORDING FACILITIES									
	VIDEO TAPE RECORDERS			VIDEO CASSETTE EQUIPMENT			VIDEO TAPE MONITORS OR TV SETS		AUDIO EQUIPMENT	
INSTITUTION	NUMBER	BRAND	FORMAT	NUMBER	BRAND	FORMAT	NUMBER	BRAND	CASSETTE	REEL-TO-REEL
Bridgewater State College	2 2	Sony Concord	1/2" 1/2"					RCA		X
Massasoit C.C.	6	Sony	1/2" 1"					Panasonic	X	X
Stonehill College	3	Sony JVC	1/2"					RCA G.E. Sony	yes	

Fall River/New Bedford Area

INSTITUTION	NUMBER	BRAND	FORMAT	NUMBER	BRAND	FORMAT	NUMBER	BRAND	CASSETTE	REEL-TO-REEL
ristol C.C.	3 3	Ampex Sony EIAJ	1" 1/2"					G.E.	X	X
outheastern Mass. Univ.	1 5 8	Sony Sony Ampex	1/2" 3/4" 1"		Sony JVC	3/4" U-matic	15 62 4	monitors receivers TV projectors Magnavox RCA Conrac Miratel	X	X
wain School of Design	1	Sony	1/2"					Sony		

Falmouth/Barnstable Area

INSTITUTION	NUMBER	BRAND	FORMAT	NUMBER	BRAND	FORMAT	NUMBER	BRAND	CASSETTE	REEL-TO-REEL
Cape Cod C.C.	2	Sony	1"					Conrac CUB23-C		X

BEST COPY AVAILABLE

II: INVENTORY OF TELEVISION RECORDING FACILITIES IN MASSACHUSETTS INSTITUTIONS OF HIGHER EDUCATION

BOSTON REGION

Boston Area

INSTITUTION	TELEVISION RECORDING FACILITIES									
	VIDEO TAPE RECORDERS			VIDEO CASSETTE EQUIPMENT			VIDEO TAPE MONITORS OR TV SETS		AUDIO EQUIPMENT	
	NUMBER	BRAND	FORMAT	NUMBER	BRAND	FORMAT	NUMBER	BRAND	CASSETTE	REEL-TO-REEL
Aquinas J.C.										
Babson College	1	Panasonic	1/2"					Sony	X	X
Bentley College	2	Sony	1/2"					Sony Panasonic		X
Blue Hills Regional Technical School	2	Ampex	1"				3 8	Conrac (video) Admiral CRF/video		X
Boston College	5	G.E. Sony Panasonic	1/2" 1"					Sony Setchell-Carlson	X	X
Boston Conservatory of Music										
Boston State College	4		1/2"					Sony	X	X
Boston University										
School of Public Communications	5 2 1	IUC Sony Ampex	1" 1" 2"					Sony Admiral Ball Bros.	X	X
School of Nursing	2 2 1 3	Sony Sony (old format) Sony portable	1" 1/2" 1/2"					Sony	X	X
School of Education	3 2 2 1 1	Sony (new format) Sony (old format) Ampex Concord	1/2" 1/2" 1" 2" 1"	1 2	Sony VL1600 Sony VP1000			Sony Setchell-Carlson		X
Brandeis University*										
Career Academy	1	Panasonic	1/2"					Panasonic		X
Curry College	2		1/2"					Sony	X	X
Eastern Nazarene College	2	Sony	1/2"					Sony		X
Emerson College	6 2 2	Shibaden Sony IUC	1/4" 1/4" 1/2"					Sony-Conrac RCA	yes	
Garland J.C.										

* some facilities for film, limited information available.

BEST COPY AVAILABLE

II: INVENTORY OF TELEVISION RECORDING FACILITIES IN MASSACHUSETTS INSTITUTIONS OF HIGHER EDUCATION

BOSTON REGION

Boston Area, cont'd.

INSTITUTION	TELEVISION RECORDING FACILITIES									
	VIDEO TAPE RECORDERS			VIDEO CASSETTE EQUIPMENT			VIDEO TAPE MONITORS OR TV SETS		AUDIO EQUIPMENT	
	NUMBER	BRAND	FORMAT	NUMBER	BRAND	FORMAT	NUMBER	BRAND	CASSETTE	REEL-TO-REEL
Graham J.C.	6 3 1 1	IUC Sony Sony cassette Ampex	1" 1/2" 1"		Sony Record/ Playback			Setchell-Carlson Miratel G.E.		X
Harvard University	3 1 1 1 1	Sony AV-3650 Sony AV-3600 Sony EV-320F Sony EV-310 Sony EV-200	1/2" 1/2" 1" 1" 1"	2 1	Sony VP-1000 U-matic cassette playback Sony VO-1600 U-matic cassette playback	3/4" 3/4"	3 3 3 2 2	Sony 11" Sony 18" Conrac 25" Ball Bros. 9" Sony Trinitron 12"	X	X
Lasell J.C.										X
Mass. Bay C.C.	1	Ampex	1"					Stromberg-Carlson	yes	
Mass. College of Art	2		1/2"					Panasonic		X
Mass. College of Optometry	2	Sony AV-3600	1/2"					Sony CVM-920V	X	
Mass. College of Pharmacy	2	Sony	1/2"					Sony G.E.	X	X
Mass. Institute of Technology	17	Ampex Sony Panasonic JVC	1/2" 3/4" 1"		Sony JVC	3/4"		Conral Sony Setchell-Carlson Shibaden	X	X
Mass. Radio & Electronics School								various		
Mount Ida J.C.	2	Sony	3/4"					Sony		X
New England Conservatory of Music									X	X
Newbury J.C.		Sony	1/2"					Sony		
Newton College		Panasonic	1/2"					Sony	X	X
Northeast Broadcasting School	1	Sony	1/2"					yes		X
Northeastern University	7 2 2	Sony Sony EIAS Sony CV Panasonic Shibaden	1" 1/2"					Setchell-Carlson Conrac Zenith Sony Sears Admiral	X	X
Pine Manor J.C.	1	Sony			Sony					
Regis College	1	Sony AV-3600	1/2"					Sony	X	X
Rets Electronics School	1	Sony	1/2"					Admiral		X
Simmons College	7 1	Sony Sony	1/2" 1"					Sony	yes	
Suffolk University	3	Panasonic Sony	1/2"					Panasonic	X	
Tufts University	2 7 3	Panasonic -- Sony	1/2" 1/2" 1"	2 13	Sony recorders Sony players	1/2"	44 14	RCA Sony	X	X
Wellesley College	5	Sony	1/2"					Sony RCA		X
Wentworth Institute	1	Sony	1/2"		Sony	1/2"	4	Sony	X	X
Wheelock College	2		1/2"				3			X

II.J.2. Cable TV Locations in Massachusetts

BEST COPY AVAILABLE

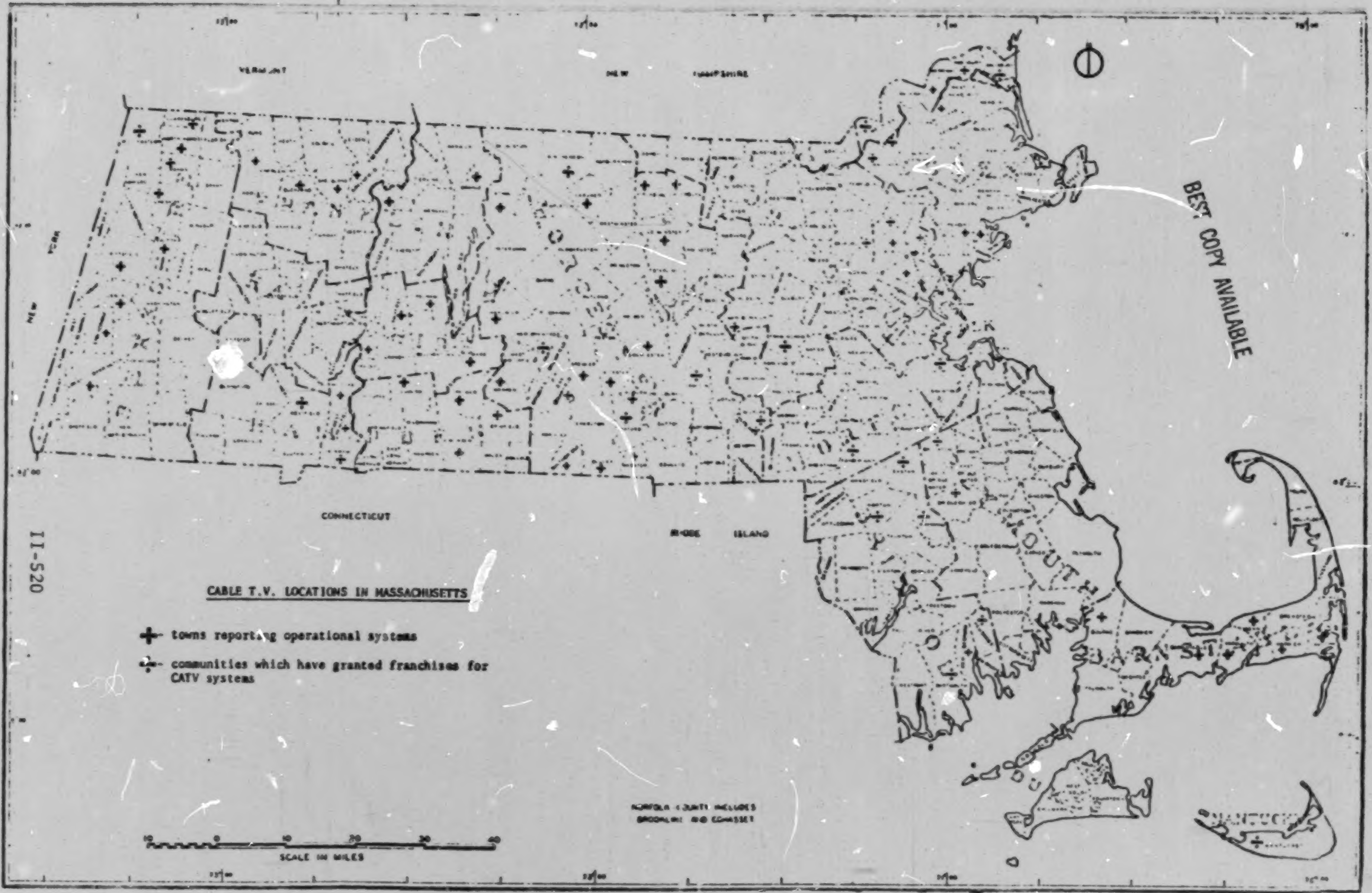
Introduction

The following map of the Commonwealth indicates what communities had granted franchises for cable TV systems as of March 1973. According to information published in the Boston Globe on 26 March 1973, a total of 92 franchises had been granted by the Massachusetts Community Antenna Television Commission (CATV) as of 20 March 1973. Of the 92, 51 towns reported operational systems, some of which may have been only demonstration units at the time.

This information, displayed in the following map, is of course partial and incomplete. By September of 1973, the CATV Commission expects to have available more extensive information, thus making possible the compilation of franchises granted since the six month moratorium on new franchises (20 September 1972 thru 20 March 1973) and an indication of which systems are operational and which are still at the demonstration stage. For an extensive survey of the whole problem of educational planning for TV systems in Massachusetts, readers of this report are referred to another MACE sponsored study, The Here, Now and Tomorrow of Cable Television in Education.*

---

*Subtitled: A Planning Guide for School Superintendants and School Committees. Creative Studies, Inc., Boston (10 October 1973), Ms. Toby H. Levine, Study Director.


VERMONT
NEW HAMPSHIRE
NEW YORK
CONNECTICUT
RHODE ISLAND
NANTUCKET
NORFOLK COUNTY INCLUDES
BROOKLINE AND COHASSET
10 0 10 20 30 40
SCALE IN MILES

BEST COPY AVAILABLE

CABLE T.V. LOCATIONS IN MASSACHUSETTS

- ✚ towns reporting operational systems
- ✚ communities which have granted franchises for CATV systems

K. The Postsecondary Education Periphery

BEST COPY AVAILABLE

1. Geographic Distribution of Institutions (Maps) . . . II-523
  Discussion II-523
  Maps Locating Periphery Institutions II-524

2. Trends in Enrollments. II-527
  Discussion II-527
    Proprietary Institutions II-527
    Adult Education Programs II-528
    Home Study Schools II-528
    Independent Schools. II-528
  Trend Charts for Periphery Institutions. II-529

3. Inventory of Programs. II-573
  Discussion II-573
    Proprietary Institutions II-573
      Category 1: Business and Office. II-573
      Category 2: Trade and Technical. II-575
      Category 3: Cosmetology II-576
      Category 4: Medical and Health II-577
      Category 5: Other Institutions II-578
    Public Regional Vocational-Technical Schools
      and Agricultural Institutes. II-579
    Adult Education Programs II-579
    Home Study Schools II-580
  Table: Inventory of Programs in Proprietary
    and Independent Institutions II-581
  Table: Inventory of Postsecondary Level Courses
    in Adult Education Programs. II-585
  Table: Inventory of Home Study School Programs . . II-588

4. Cooperation and Coordination II-589
  Discussion II-589
    Proprietary Institutions II-589
    Adult Education Programs II-589
  Table: Cooperation and Coordination Among
    Proprietaries. II-590
  Table: Cooperation and Coordination Among
    Adult Education Programs II-593

5. Fees

  Discussion II-596
  Table: Fees Charged in Proprietary Schools
    and in Adult Education (By Area) II-597
  Table: Fees Charged in Home Study Schools with
    Massachusetts Students. II-601

6. Student Clienteles. II-602
  Discussion. II-602
    Proprietary and Independent Institutions. II-602
    Adult Education Programs. II-602
    Home Study Schools. II-602
  Table: Student Clientele in Proprietary and
    Independent Institutions. II-603
  Table: Student Clientele in Adult Education
    Programs. II-606
  Table: Student Clientele in Home Study Schools. . . II-609

II.K.1. Geographic Distribution of Institutions

The following maps show the locations of institutions in Massachusetts which constitute the Education Periphery.

Map #1 shows the distribution of proprietary and independent institutions across the State. Included are schools which have either a full-time or a part-time program or both. These schools were identified from the National Center for Educational Statistics listing of proprietary and independent schools, the Yellow Pages listings, and newspaper advertising.

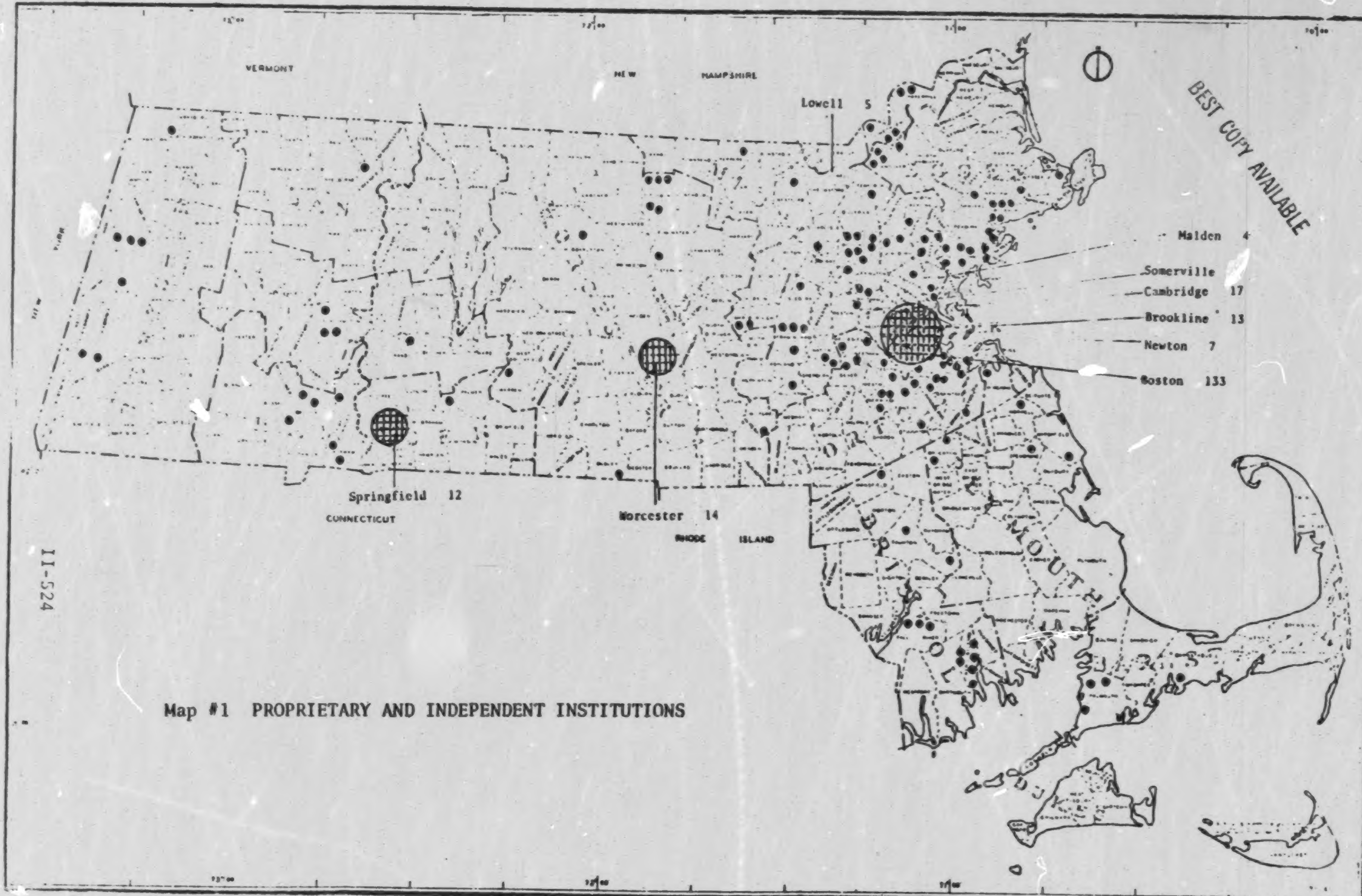
These institutions are clearly concentrated in the metropolitan areas, particularly Boston. This concentration may be explained by several factors. First, competition from public institutions has until recently been minimal in the Boston area. Secondly, some specialty schools such as florist and cooking schools must be in large centers of population to draw enough students.

Map #2 shows the distribution of public regional vocational-technical schools and agricultural institutes. They appear to be randomly spread across the State, and significantly not concentrated in Boston. This may be because proprietary institutions and other local technical institutions are currently serving vocational needs in Boston.

Map #3 shows the distribution of adult education programs in the public school systems which have courses beyond basic education. An adult education program is required in any city over 50,000. Thus the programs are spread across the urban and suburban areas. The Boston area is also served by the extensive programs of the private non-profit Boston and Cambridge Centers for Adult Education.

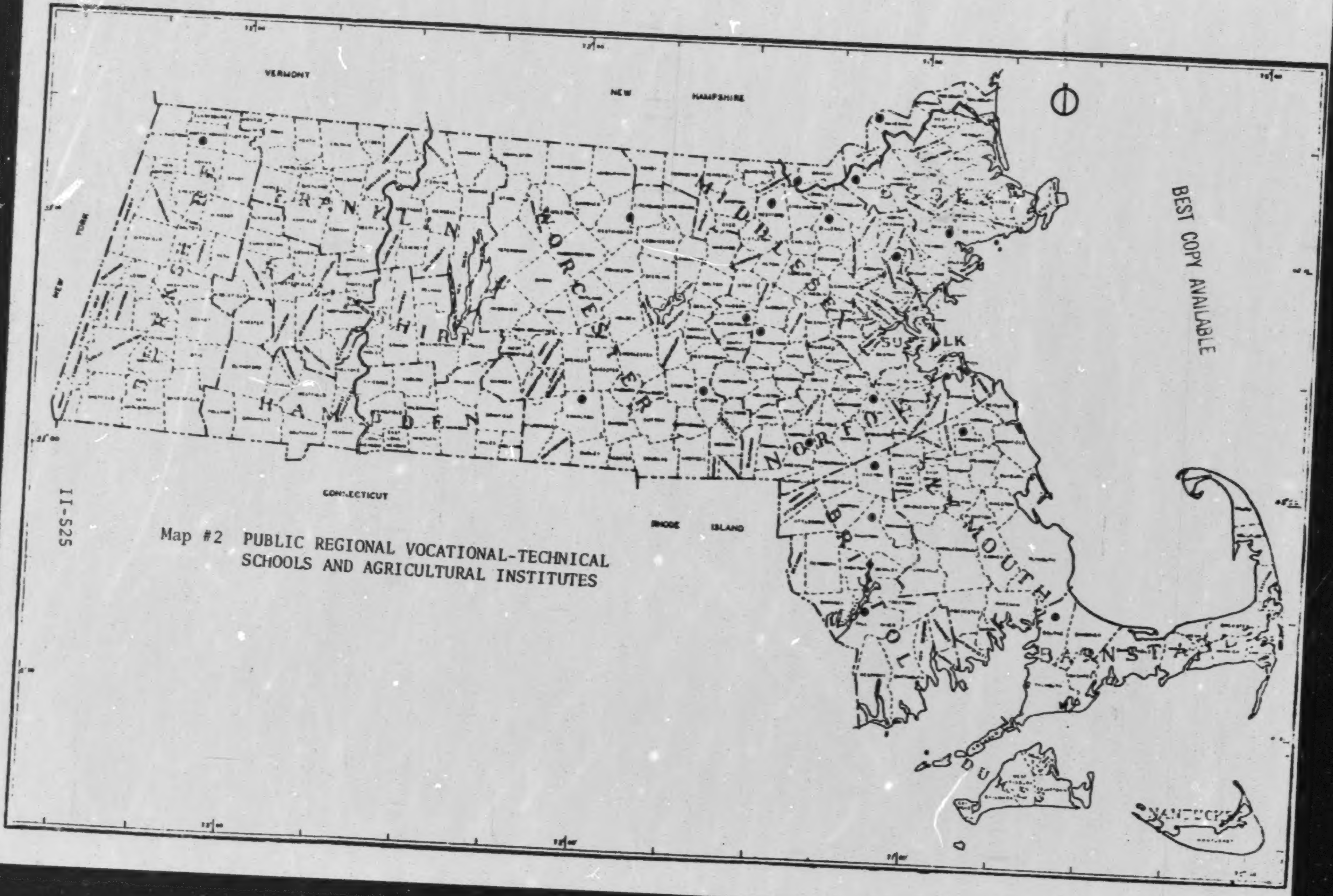
Home study and correspondence schools also serve Massachusetts residents, but there is no generalizable pattern of residence of students across the state. Some schools draw from small towns, others from the Boston area.

BEST COPY AVAILABLE

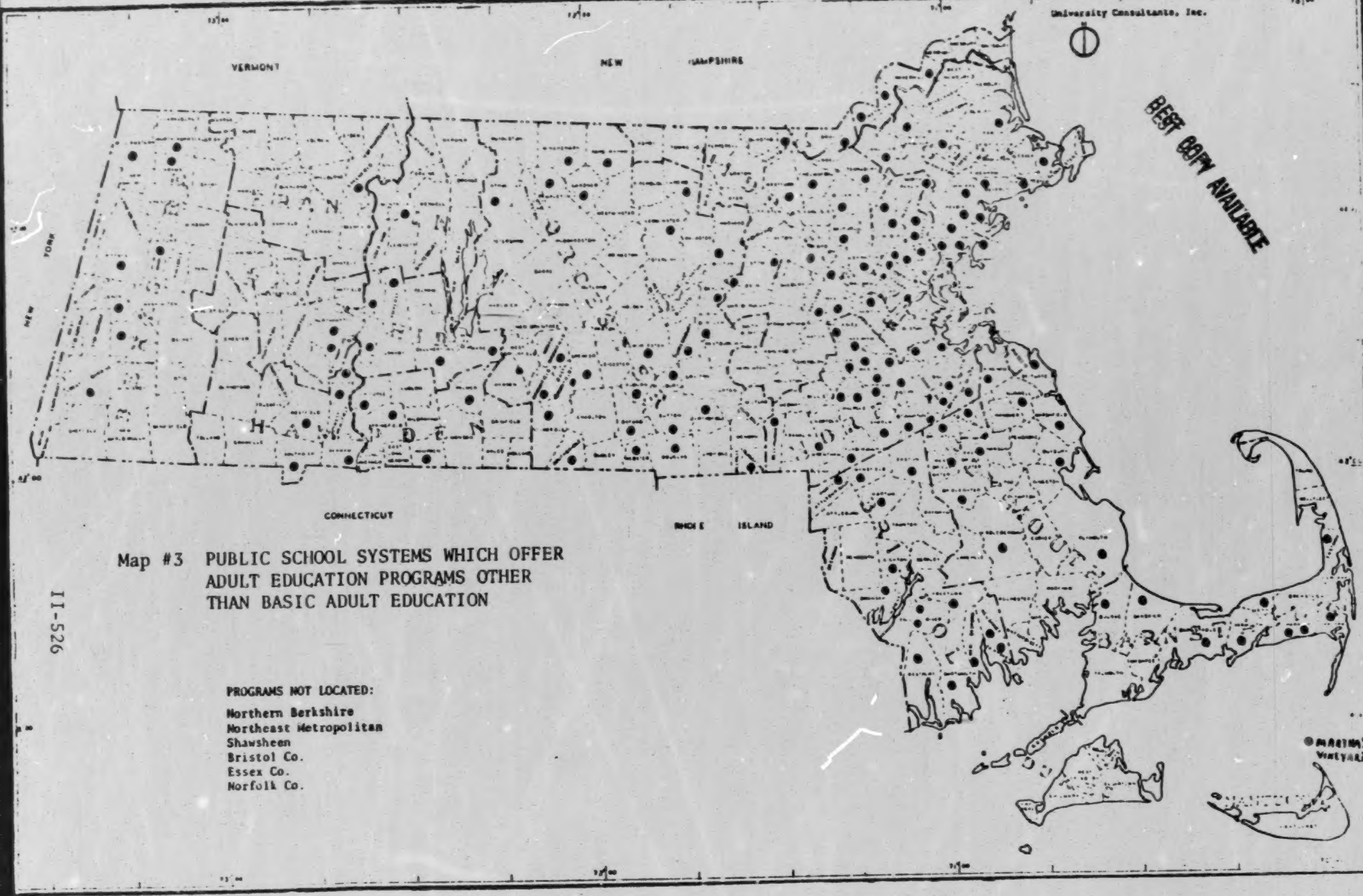

VERMONT
NEW HAMPSHIRE
Lowell 5
Malden 4
Somerville
Cambridge 17
Brookline 13
Newton 7
Boston 133
Springfield 12
CONNECTICUT
Worcester 14
RHODE ISLAND

Map #1 PROPRIETARY AND INDEPENDENT INSTITUTIONS

BEST COPY AVAILABLE


VERMONT
NEW HAMPSHIRE
NEW YORK
CONNECTICUT
RHODE ISLAND
BERKSHIRE
FRANKLIN
HAMPSHIRE
HAMPDEN
WORCESTER
MIDDLESEX
ESSEX
SUFFOLK
NORFOLK
PLYMOUTH
BRISTOL
BARNSTABLE
DUKES
NANTUCKET

Map #2 PUBLIC REGIONAL VOCATIONAL-TECHNICAL SCHOOLS AND AGRICULTURAL INSTITUTES


University Consultants, Inc.
VERMONT
NEW HAMPSHIRE
NEW YORK
CONNECTICUT
RHODE ISLAND
MARTHA'S VINEYARD

Map #3 PUBLIC SCHOOL SYSTEMS WHICH OFFER ADULT EDUCATION PROGRAMS OTHER THAN BASIC ADULT EDUCATION

PROGRAMS NOT LOCATED:

Northern Berkshire
Northeast Metropolitan
Shawsheen
Bristol Co.
Essex Co.
Norfolk Co.

BEST COPY AVAILABLE

II.K.2. Trends in Enrollments

Proprietary Institutions

Increased leisure time and uncertainty about the stability of the job market tend to account for the biggest enrollment increases in the proprietaries. Flight schools, for example, almost unanimously report a healthy increase in the past five years, an increase the owners or managers attribute to the greater amounts of free time among the more affluent in the state who can afford the traditional $1000 minimum fee. Only one flight school in the survey reported a serious drop in enrollment, a drop which was attributable, according to the owner, to the fact that the school was located in a depressed area and that the school was in competition both with others like it and with a new flight program being offered by a neighboring public institution.

The second area of substantial increase in enrollment was found in those schools offering "back up" training to men and somen whose original career plans (teaching, for example) were thwarted by the lack of available jobs or whose present jobs either are not financially satisfactory or appear less secure now than when they were first undertaken. The beneficiaries of these unstable conditions include computer programming institutions, real estate schools, and some secretarial schools, who report an increase in the enrollment of disenchanted liberal arts graduates. One tractor-trailer school also cited an increased demand due to layoffs in "indoor-type" jobs and to the increasing realization that a college education is no longer a guarantee of employment.

Those schools where enrollment has remained stable or has fluctuated since 1967 or 1968 (the years most schools report a significant decrease in the student population) report three basic reasons for their failure to show significant increases. The most frequently cited source of difficulty was the growing number of public institutions -- mostly on the college level but in some cases among high schools -- which offer the same courses for less than the proprietaries. Several proprietaries insist that the private schools can train students for far less than this training will eventually cost the state. Others simply say that a serious, wasteful duplication of efforts exists; these schools cite the lack of cooperation which they maintain now exists between the public and proprietary institutions and suggest that their own success in the future will depend on better communication between the two types of schools.

The second source of dissatisfaction among the proprietaries is that the lack of funds available to potential students keeps these students away (or sends them in search of a public program). A number of proprietaries insisted that only through state and federal funding could they expect to continue to offer their services. Two schools made specific reference to cutbacks in federal funding for such programs as WIN and Manpower, programs which enabled low-income students to pay for courses in the proprietaries. A representative of one of these schools, a hairdressing academy, insisted that the demand for graduates in cosmetology far exceeds the number of young men and women who can afford to attend the school. WIN, she said, had offered numerous young people the opportunity for schooling and a career.

Finally, the schools bemoaned the lack of respect -- or "academic stature", as one owner put it -- accorded the proprietaries in comparison with the public institutions. High school guidance counselors were frequently criticized for transfering their bias against proprietaries on to graduating seniors. They seem to be hopeful that the upsurge in interest surrounding vocational training will give to their programs the "stature" they deserve.

Adult Education Programs

Adult education programs have by and large increased enrollments, some dramatically. Even in areas with surrounding community colleges expanding noncredit programs, enrollments have risen in the high school programs. The extent of increase in both the community college and public high school programs is indicative of the nationwide trend to increasing participation in noncredit adult education.

Some programs, such as Worcester's, and the Boston and Cambridge Adult Center programs, respond quickly to changing tastes in leisure-time interests. They offer a variety of current "esoteric" courses to people who now have more leisure time than they did a few years ago.

Other causes of increasing enrollments are shifts and growth in population in the suburban areas and the rising cost of food and household items. Women are coming back into practical arts courses to save money.

Home Study Schools

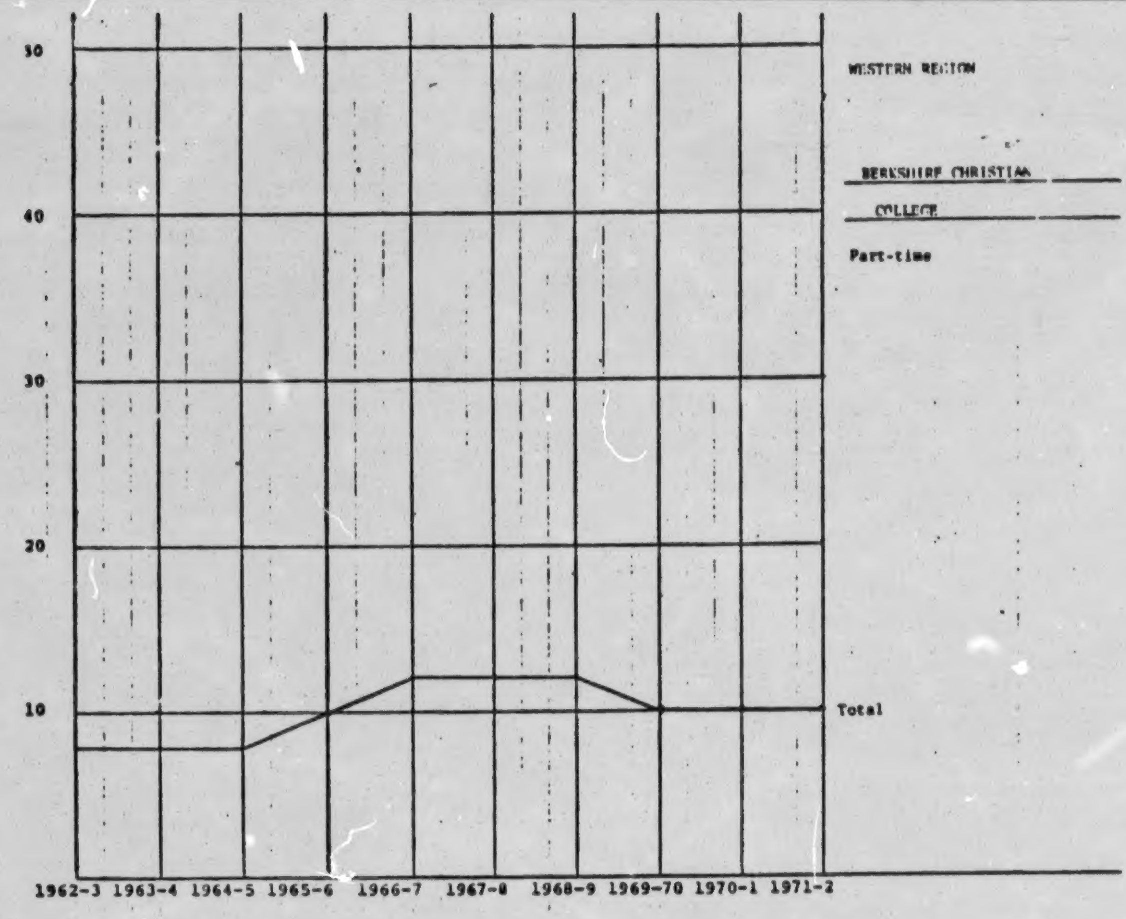
The schools reporting trend data all showed a drop in enrollments in Massachusetts over the last few years. Perhaps this may be explained by the increasing competition from new continuing education programs in the public sector. People in areas surrounding new campuses may prefer formal classes to correspondence work.

Independent Schools

Several non-proprietary independent schools are included in these periphery charts and tables which follow. The reasons they are included here are explained in the introduction to this report and have to do with the original boundaries of the study as regards private institutions (sizeable program or AICUM member).

Note to Trend Charts Which Follow

The reader is advised when seeking to interpret the trend of a particular program to (a) refer to the interpretive discussion above and in Section III.B. of this report; (b) compare the charts with the area trend charts for the degree-granting institutions in Section III.B. and the program inventory (Section II.C.) for those institutions and (c) compare the chart to those of other peripheral institutions in the same geographic area and offering the same programs of study (see tables following trend charts).

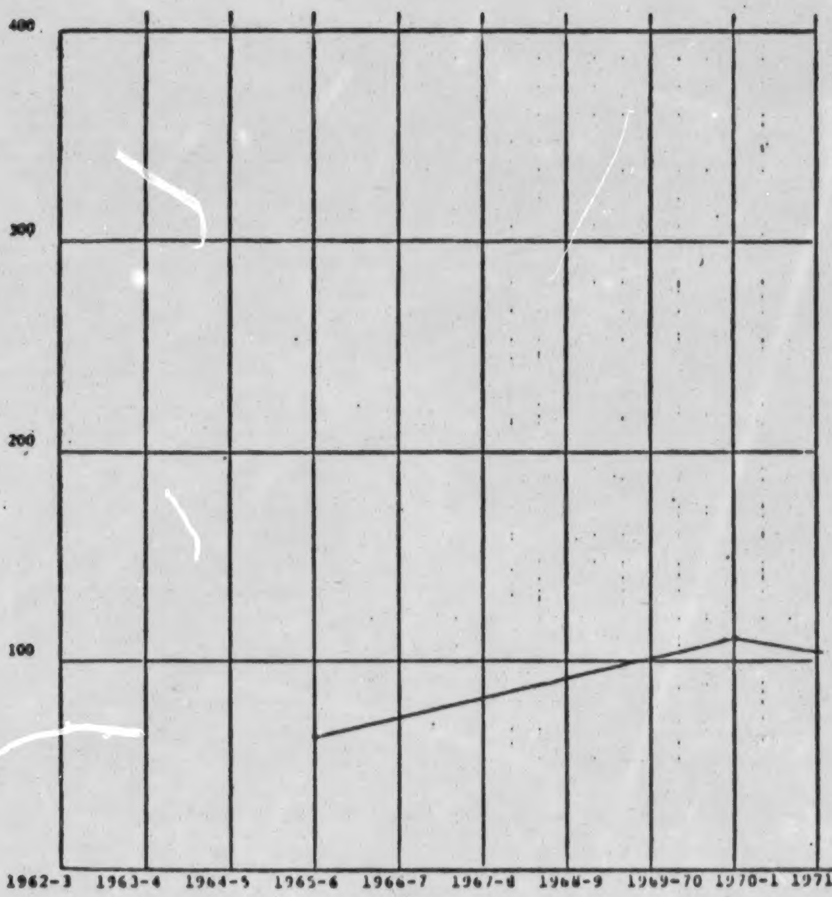


WESTERN REGION

BERKSHIRE CHRISTIAN COLLEGE

Part-time

BEST COPY AVAILABLE



REGION: Central

PROPRIETARY INSTITUTION:

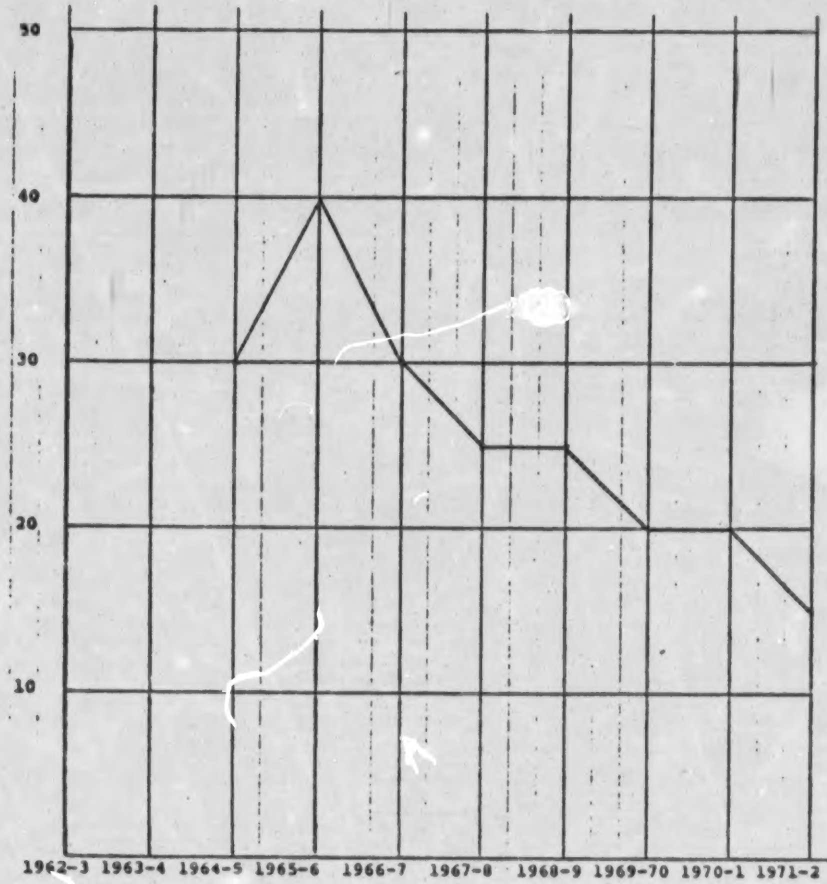
WORCESTER SCHOOL

OF ART

Student enrollments

Continuing Ed./Part-time

N.B. Day enrollment shown



CENTRAL REGION

Fitchburg/Gardner area

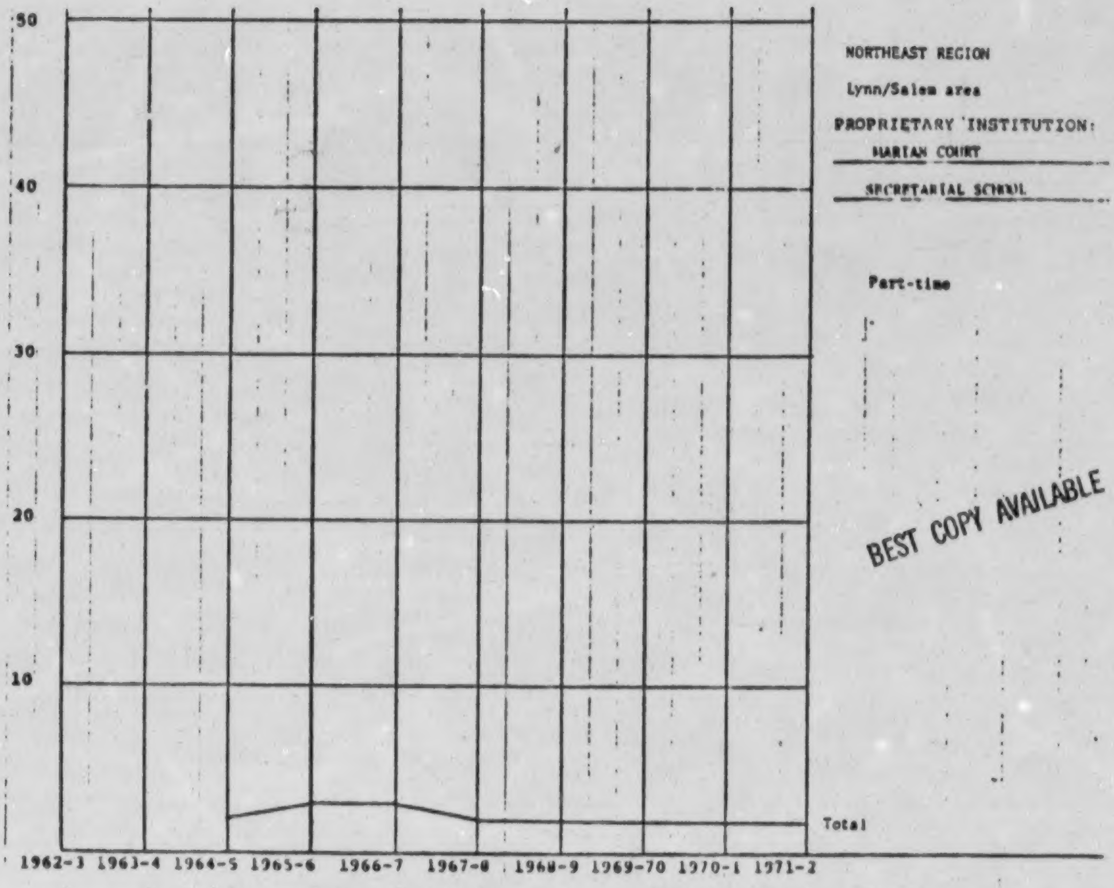
PROPRIETARY INSTITUTION:

HUNTER AVIATION

CORPORATION

Part-time

BEST COPY AVAILABLE



NORTHEAST REGION

Lynn/Salem area

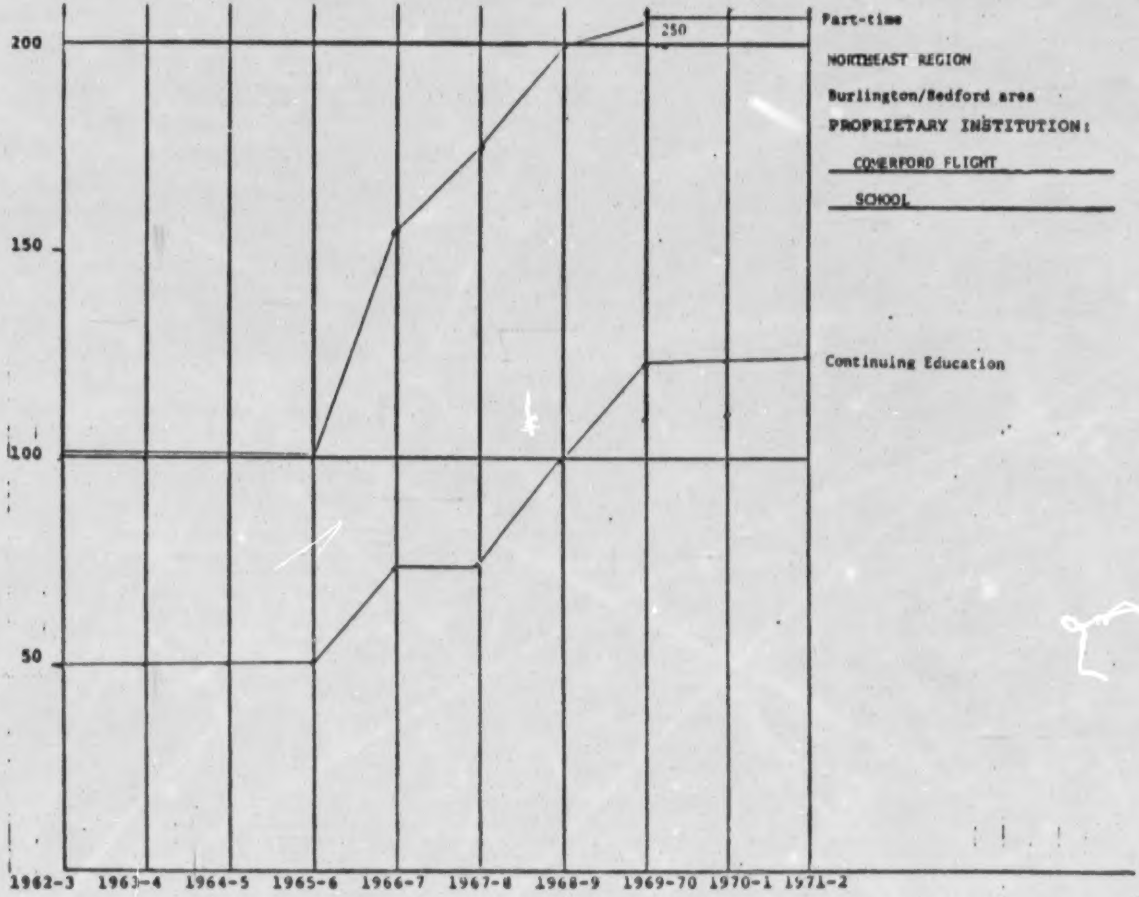
PROPRIETARY INSTITUTION:

MARIAN COURT

SECRETARIAL SCHOOL

Part-time

BEST COPY AVAILABLE



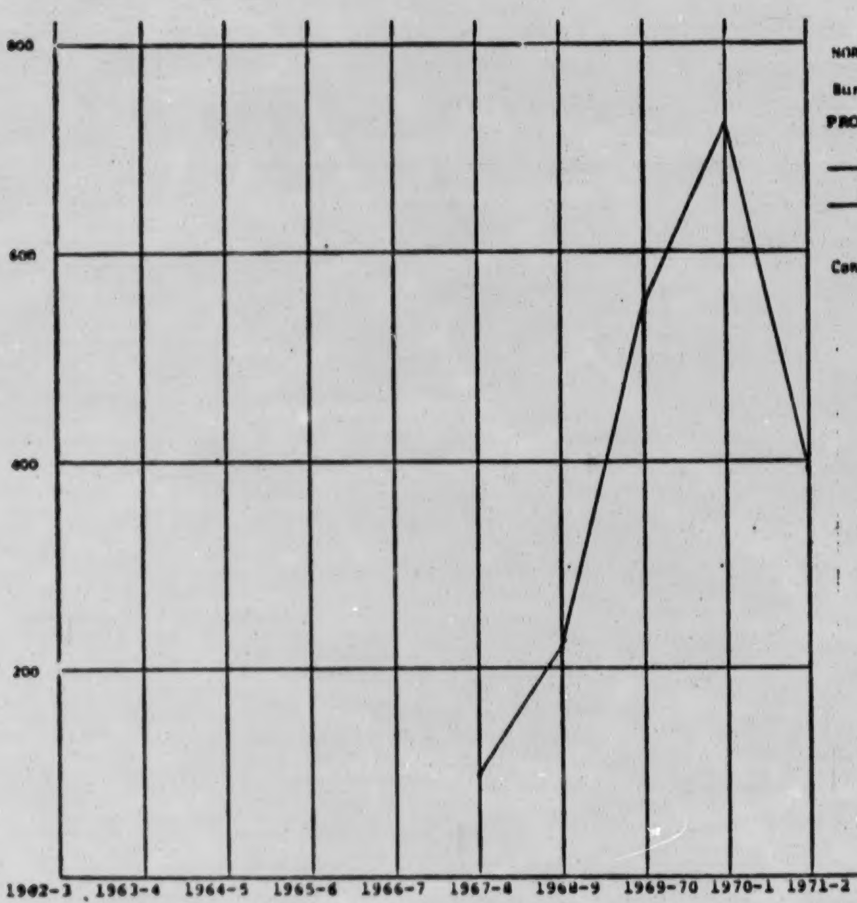
NORTHEAST REGION

Burlington/Bedford area

PROPRIETARY INSTITUTION:

COMERFORD FLIGHT

SCHOOL



NORTHEAST REGION

Burlington/Bedford area

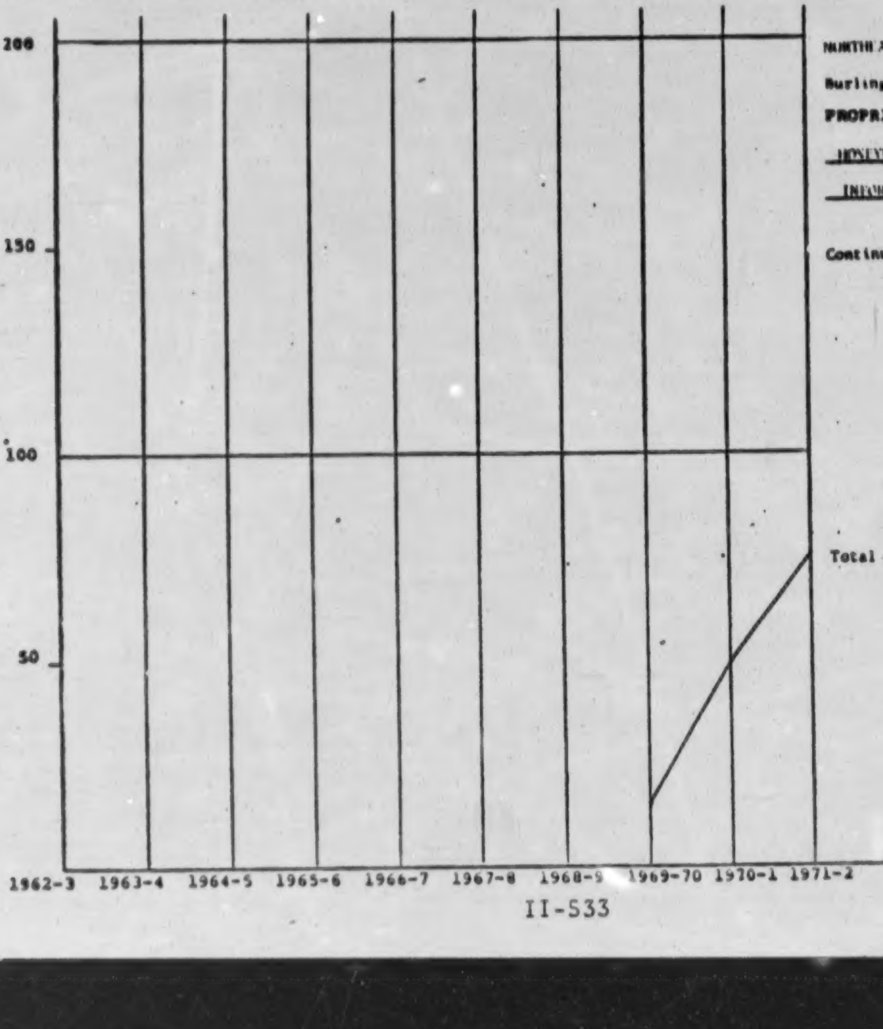
PROPRIETARY INSTITUTION:

CONTROL DATA

INSTITUTE

Continuing Education

BEST COPY AVAILABLE



NORTHEAST REGION

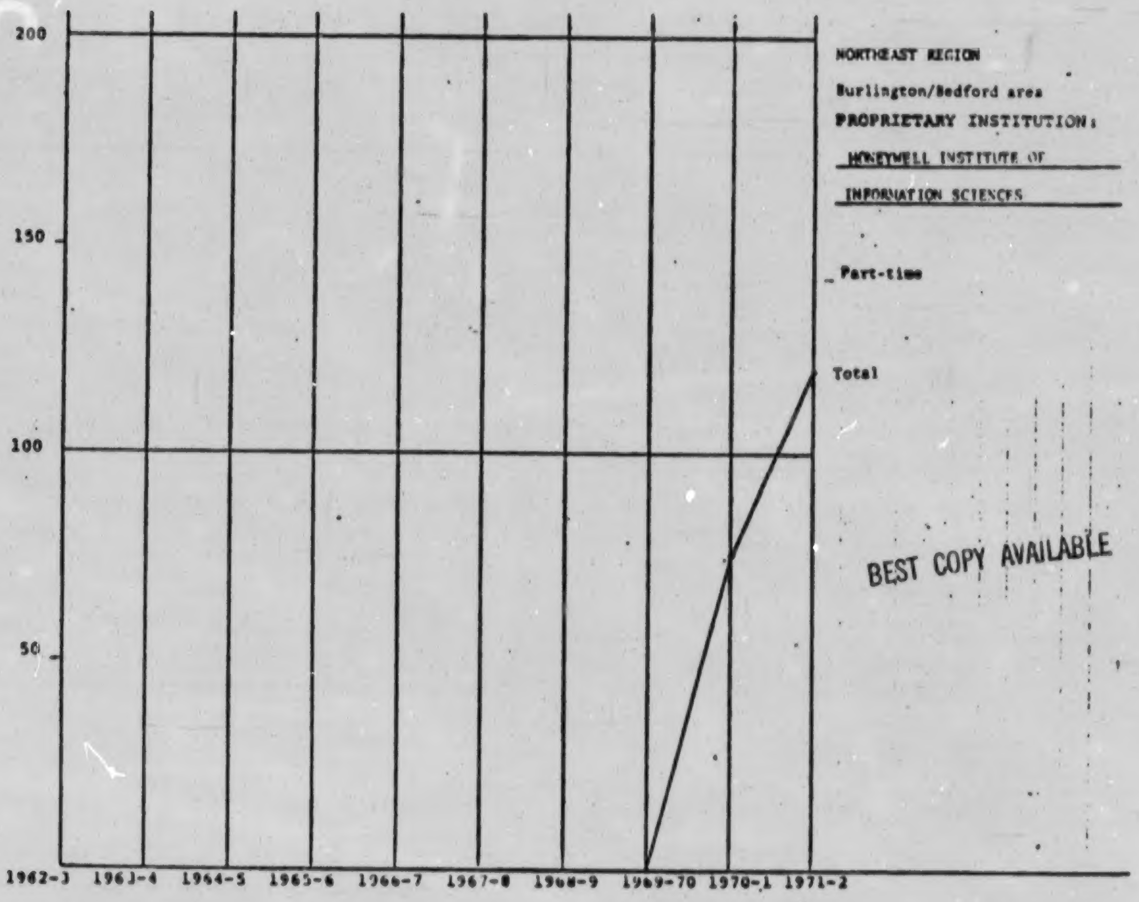
Burlington/Bedford area

PROPRIETARY INSTITUTION:

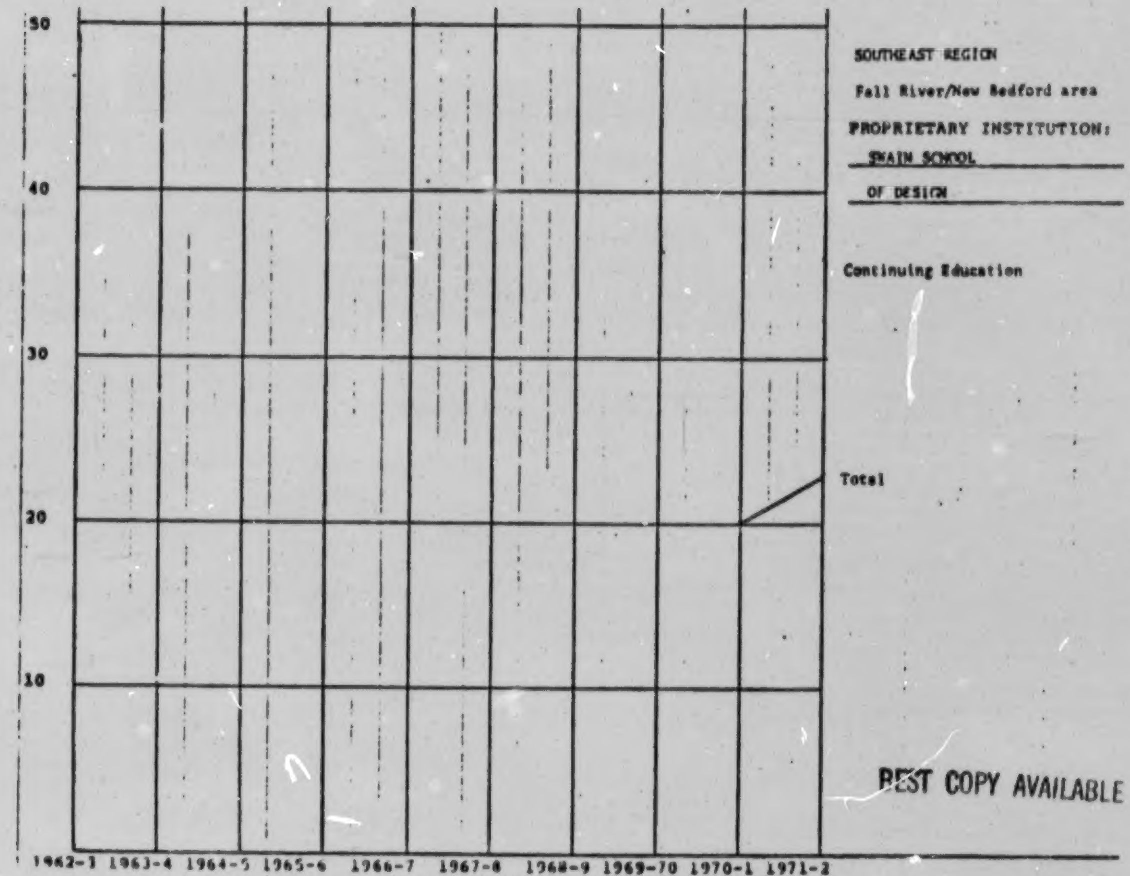
HONEYWELL INSTITUTE OF

INFORMATION SCIENCES

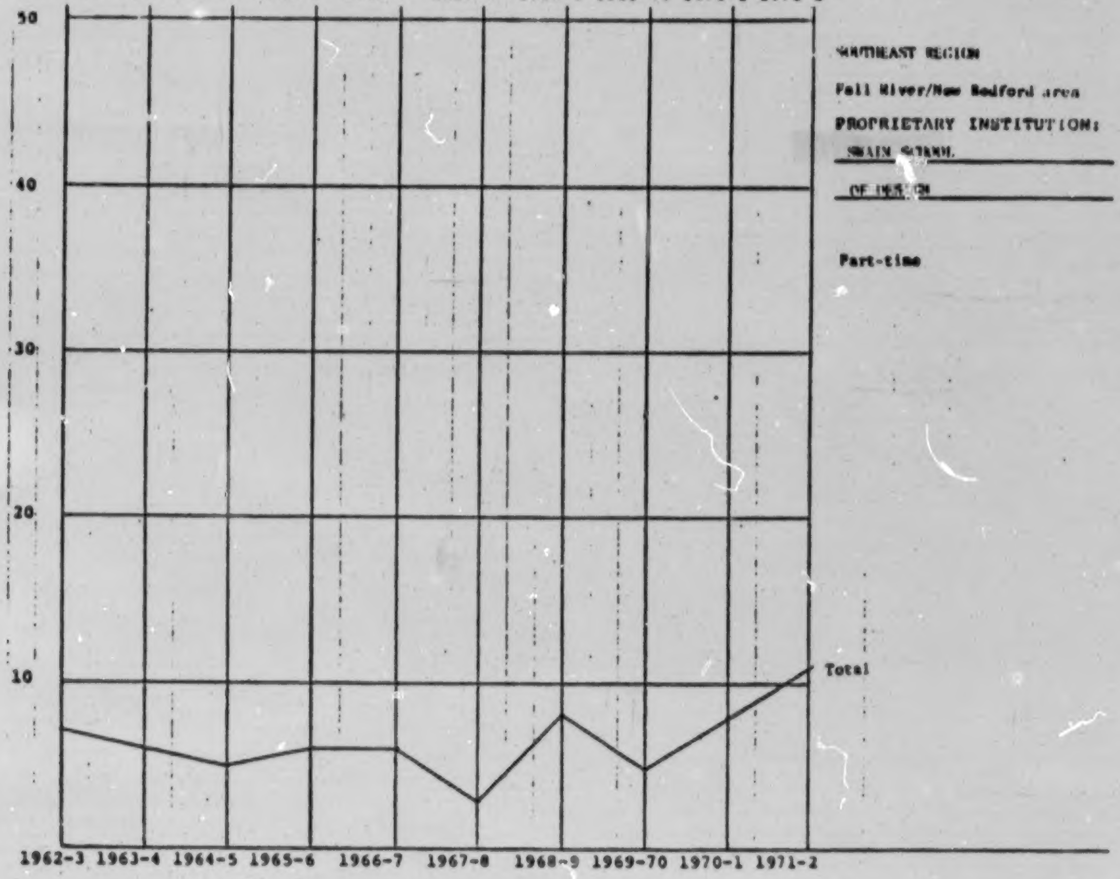
Continuing Education

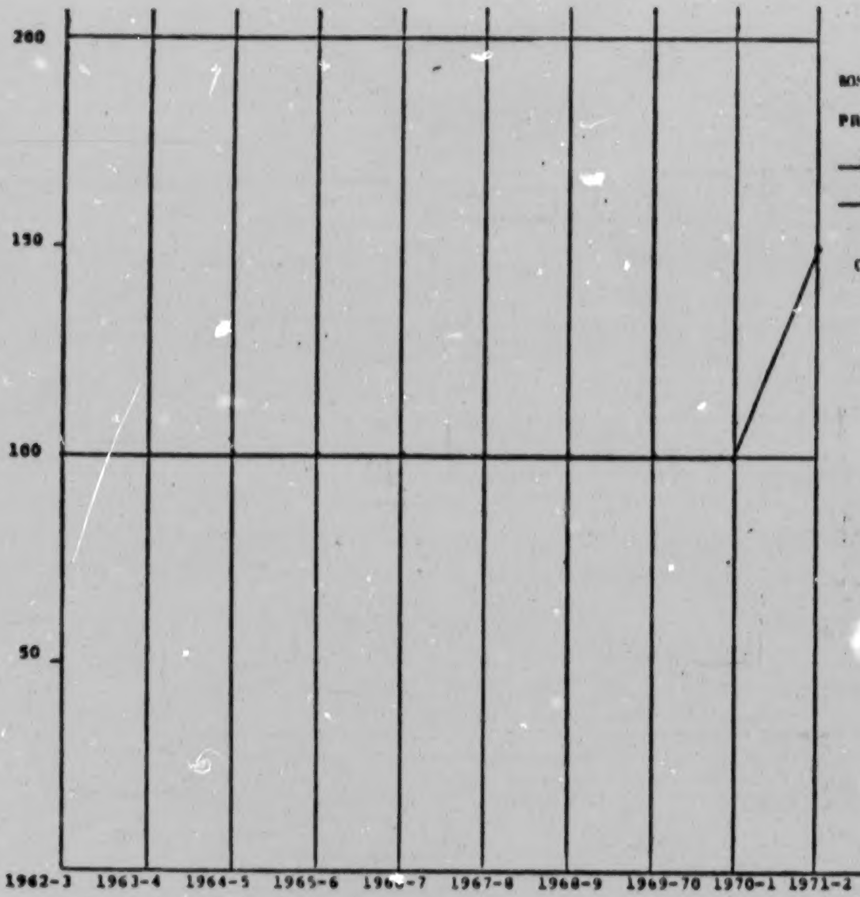


BEST COPY AVAILABLE



BEST COPY AVAILABLE





BOSTON REGION

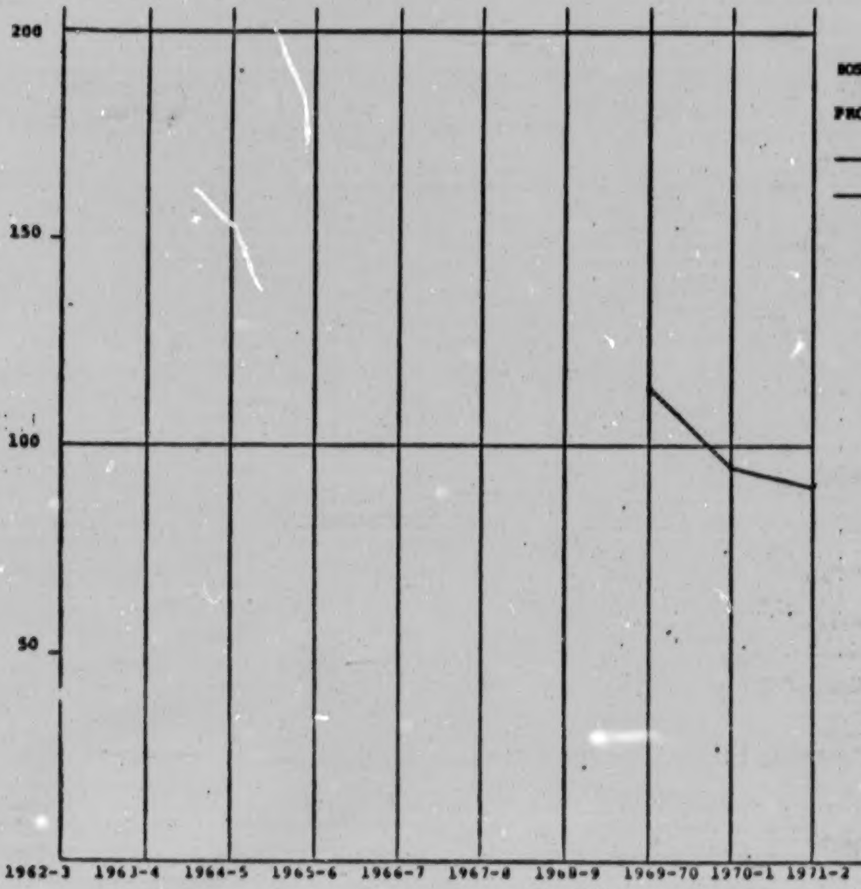
PROPRIETARY INSTITUTION:

ACADEMIE MODERNE

MODELING SCHOOL

Continuing Education

BEST COPY AVAILABLE



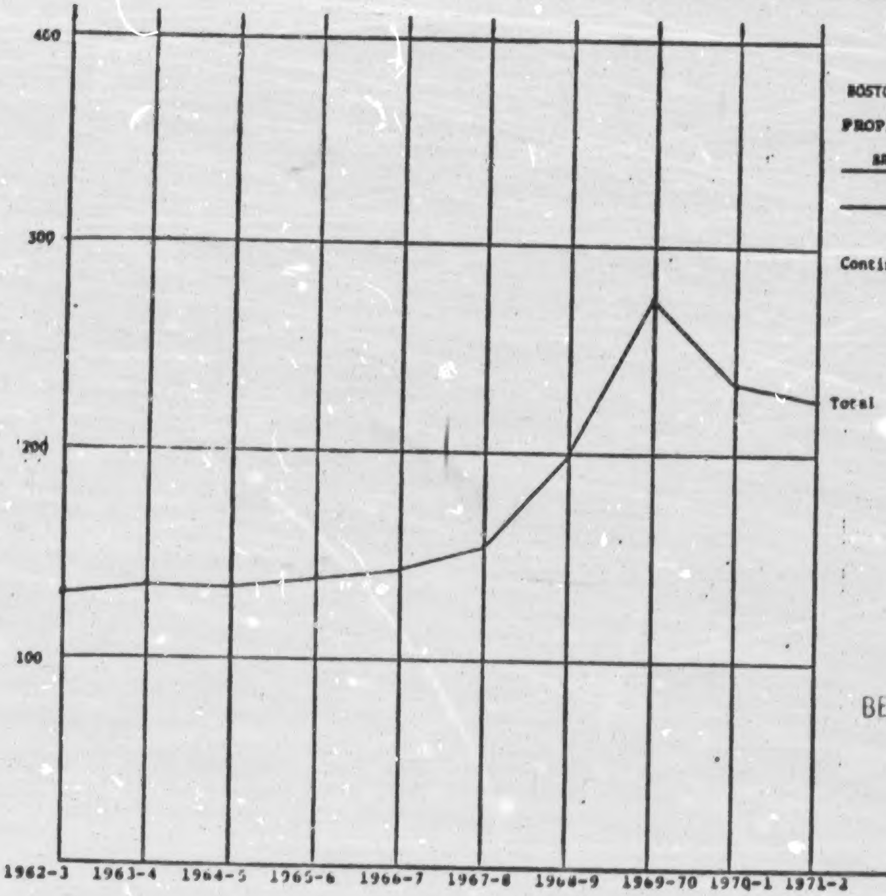
BOSTON REGION

PROPRIETARY INSTITUTION:

BAY STATE JUNIOR

COLLEGE OF BUSINESS

Part-time



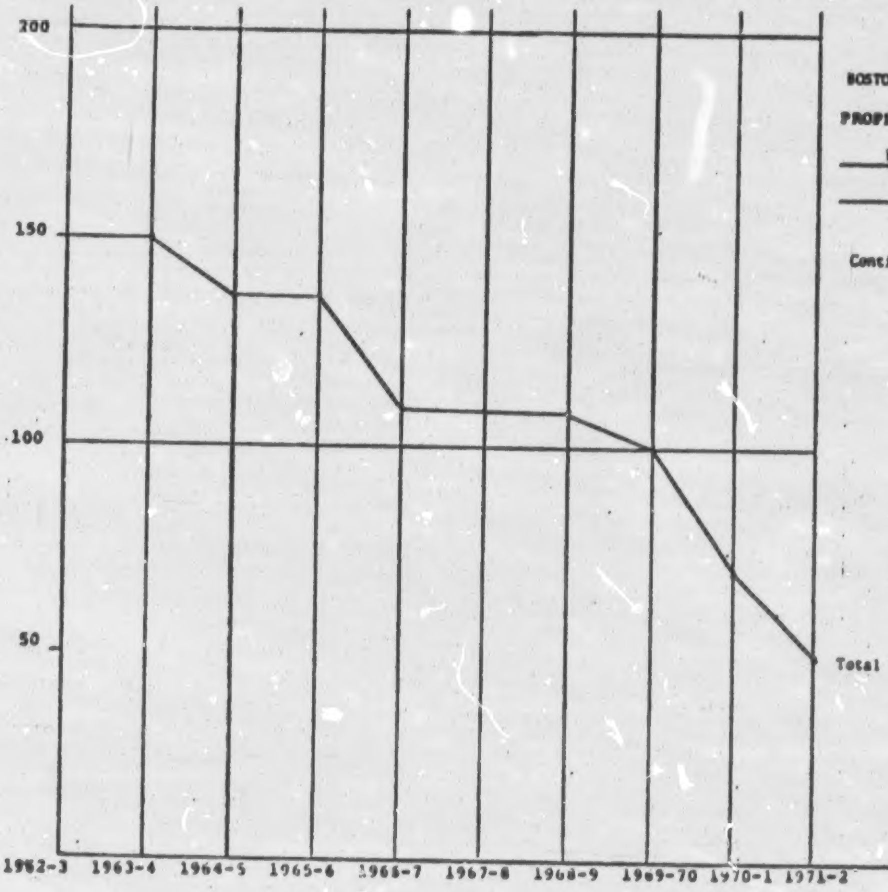
BOSTON REGION

PROPRIETARY INSTITUTION:

BRYANT AND STRATTON

Continuing Education

BEST COPY AVAILABLE

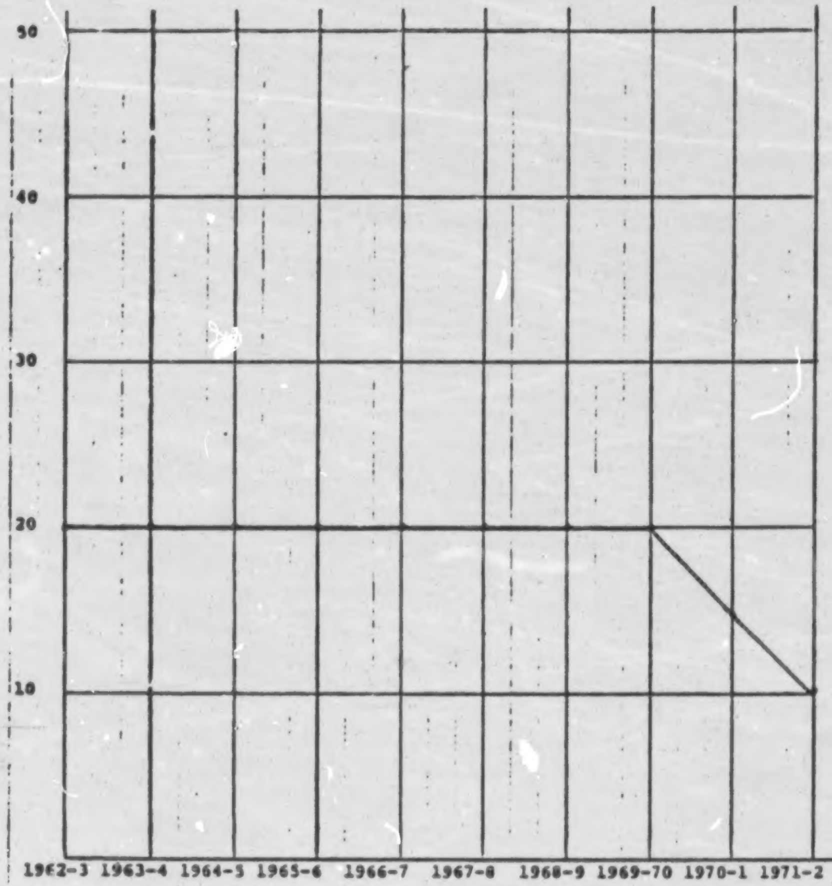


BOSTON REGION

PROPRIETARY INSTITUTION:

BURDETT COLLEGE

Continuing Education



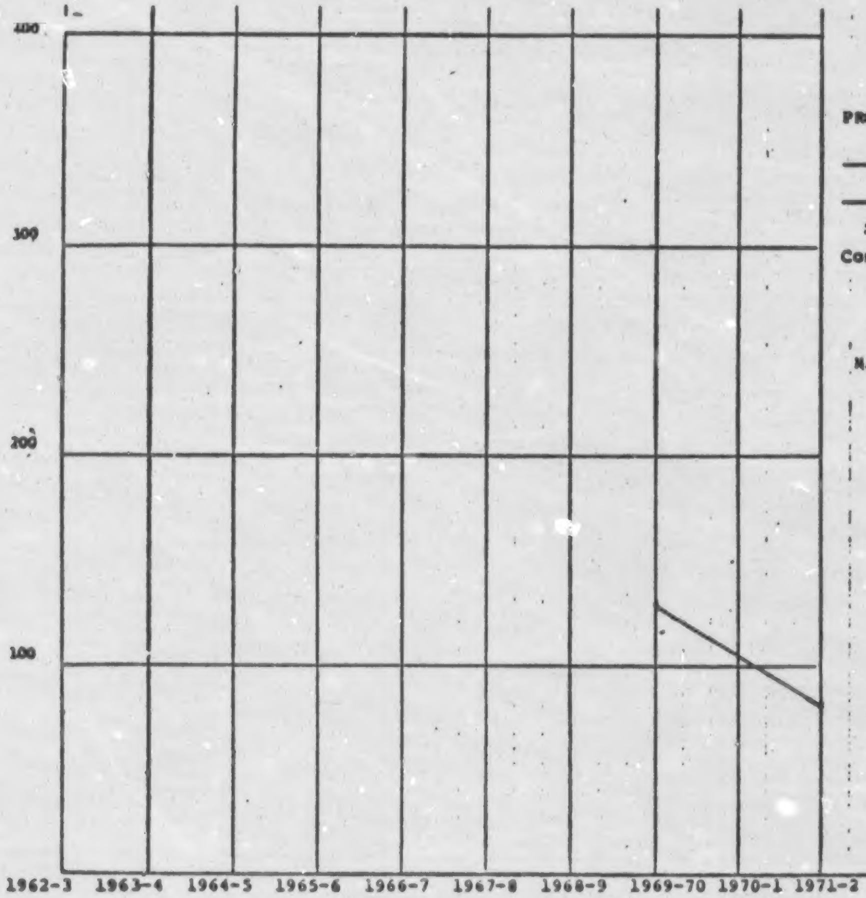
BOSTON REGION

PROPRIETARY INSTITUTION:

BURDETT COLLEGE

Part-time

BEST COPY AVAILABLE



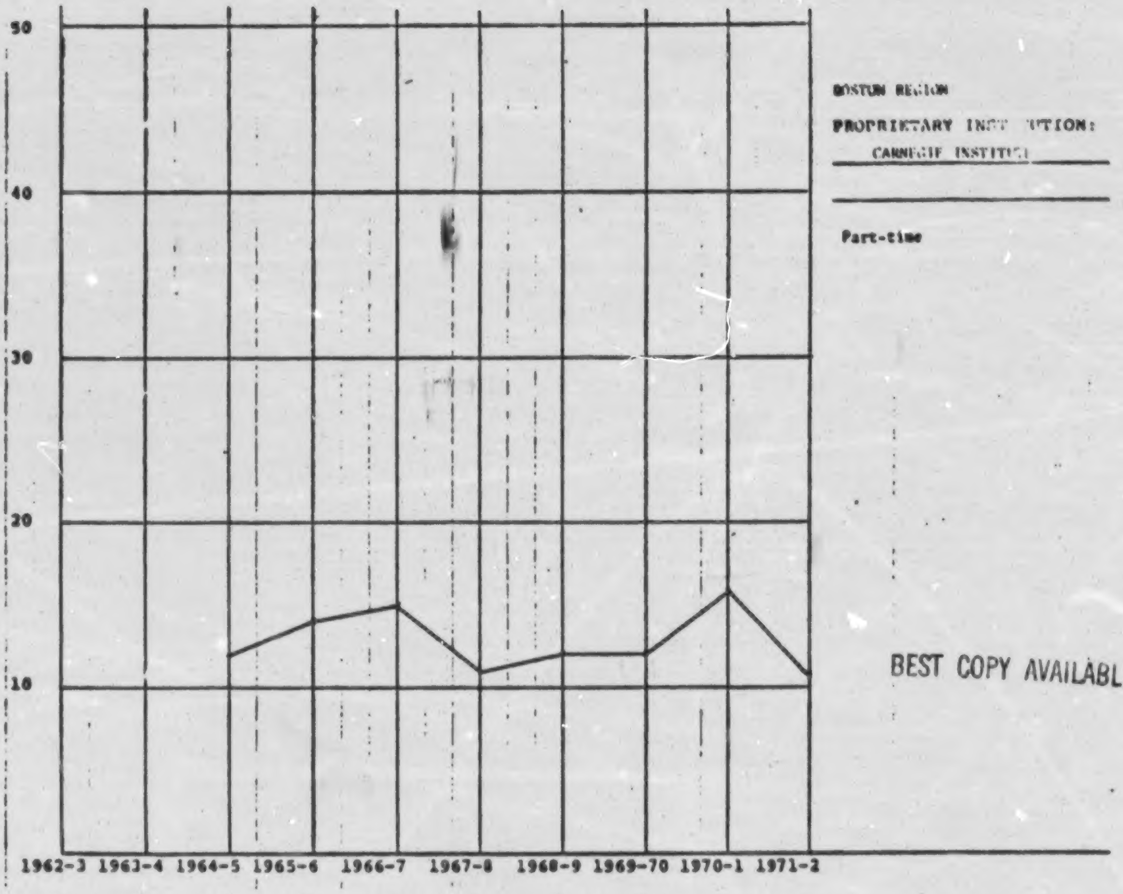
PROPRIETARY INSTITUTION:

BUTERA SCHOOL

OF ART

Student enrollments
Continuing Ed./Part-time

N.B. Total enrollment shown



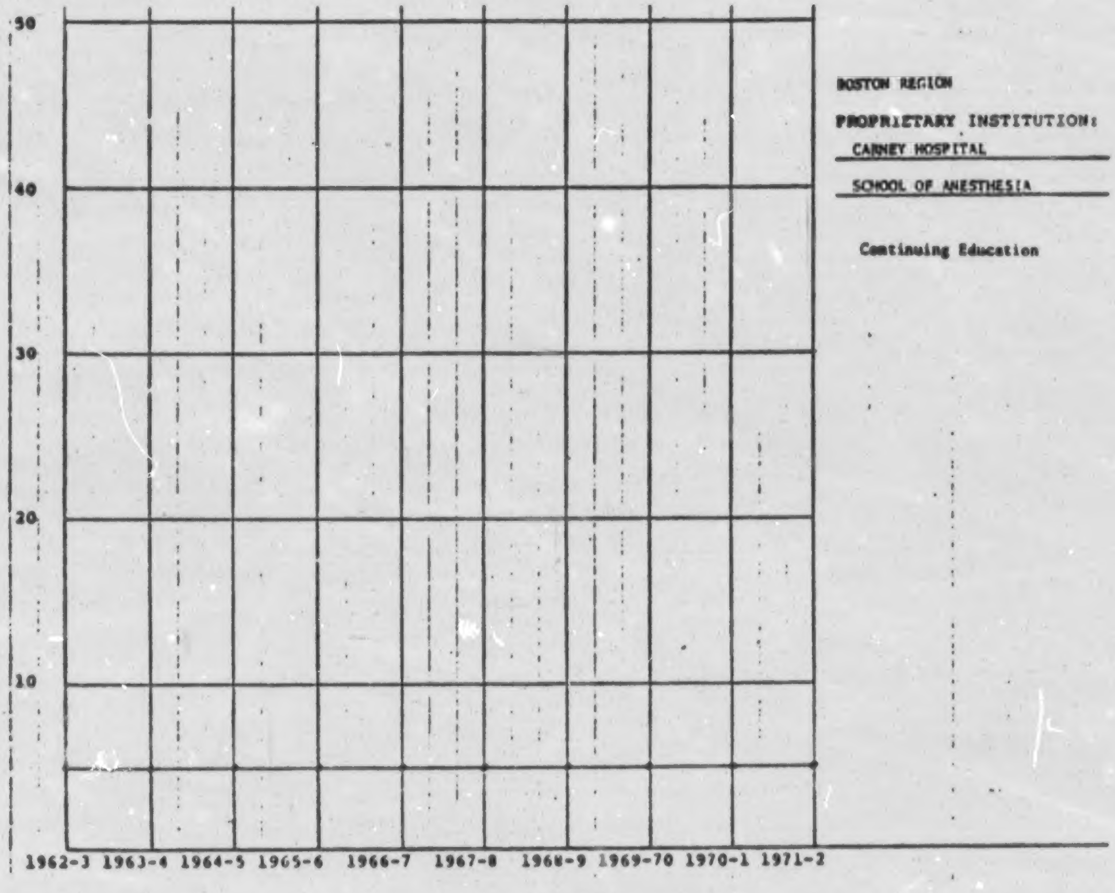
BOSTON REGION

PROPRIETARY INSTITUTION:

CARNEGIE INSTITUTE

Part-time

BEST COPY AVAILABLE



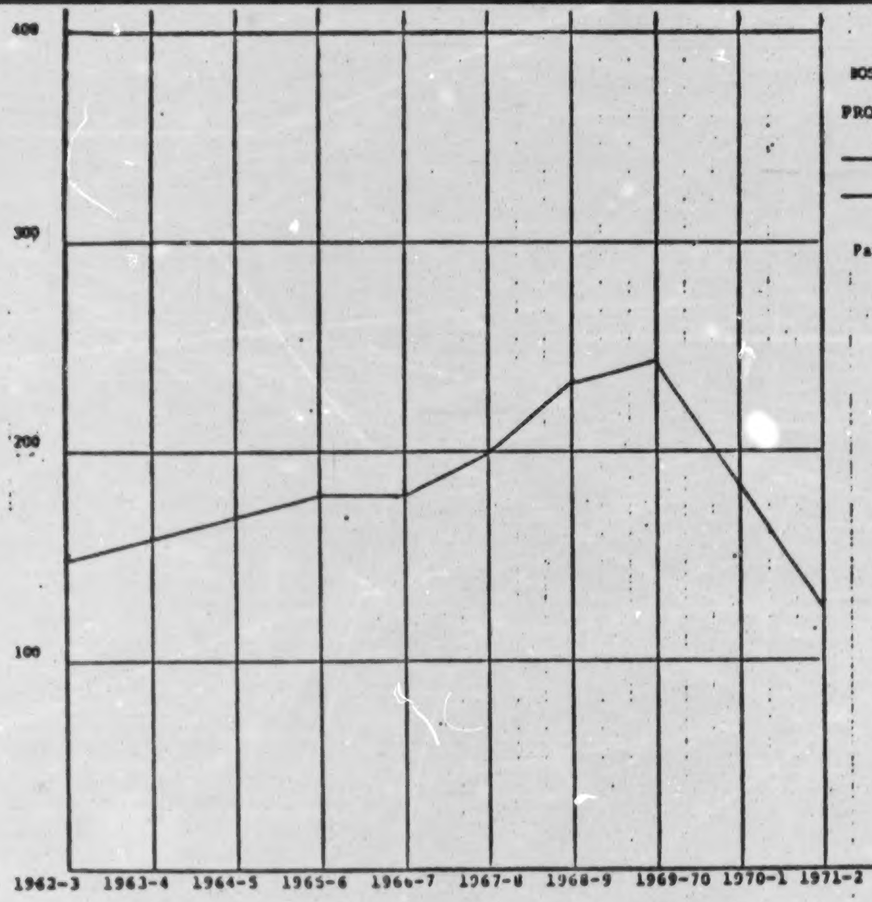
BOSTON REGION

PROPRIETARY INSTITUTION:

CARNEY HOSPITAL

SCHOOL OF ANESTHESIA

Continuing Education



BOSTON REGION

PROPRIETARY INSTITUTION:

COLLEGE HOME

STUDY CENTER

Part-time

BEST COPY AVAILABLE

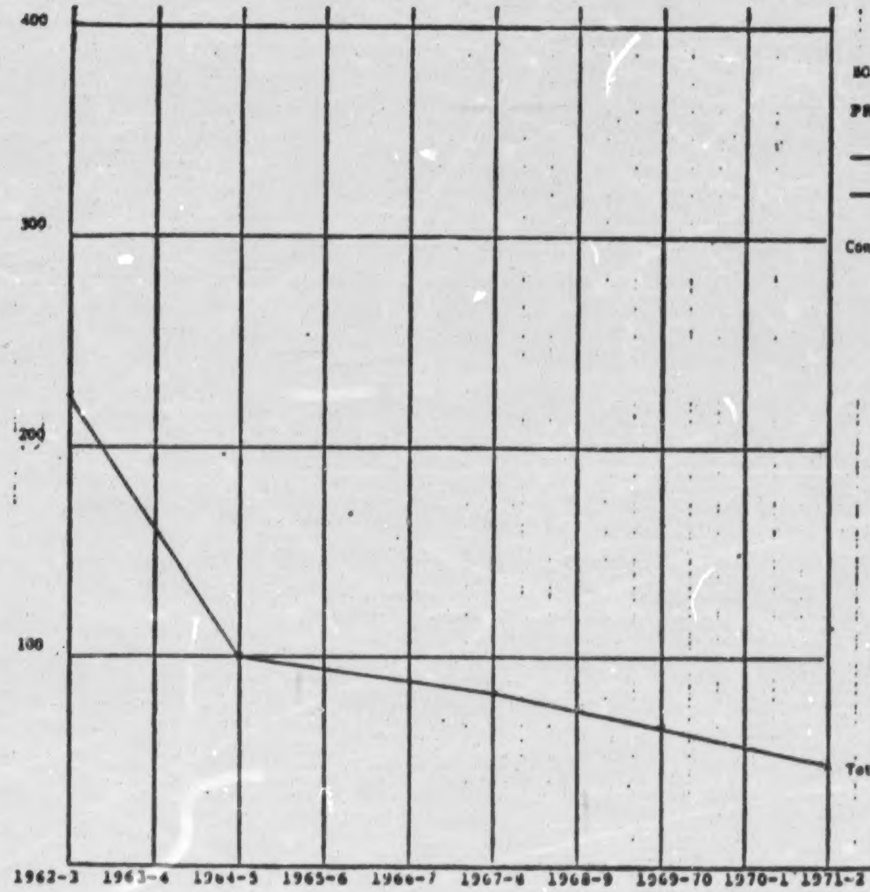
BOSTON REGION

PROPRIETARY INSTITUTION:

COYNE ELECTRICAL AND

TECHNICAL SCHOOL

Continuing Education



BOSTON REGION

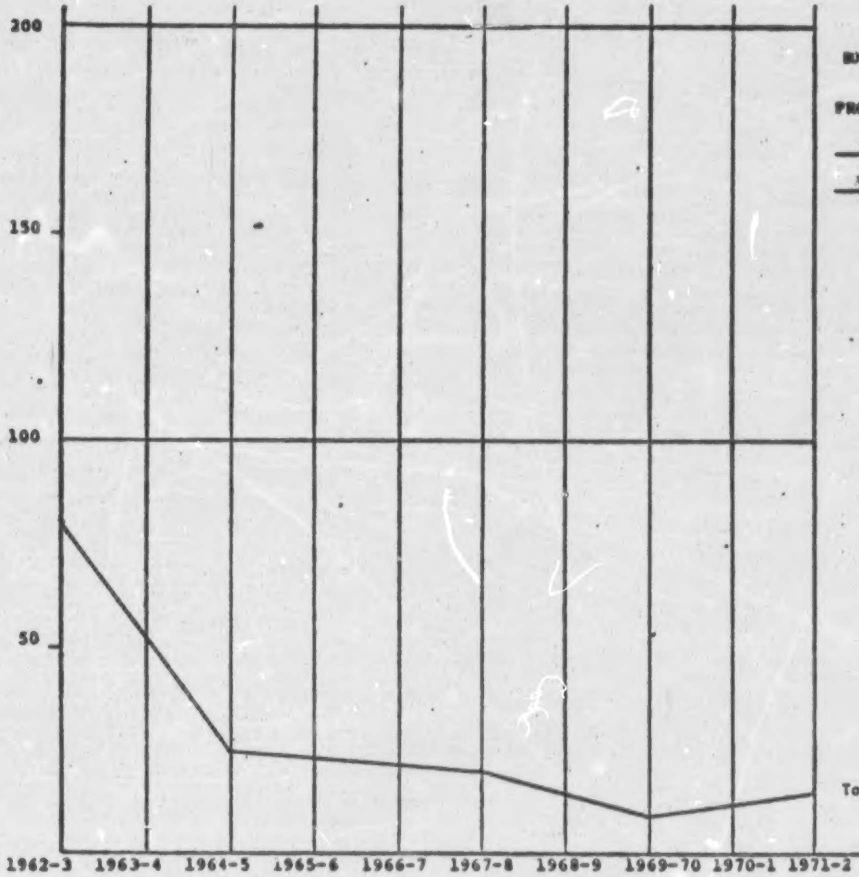
PROPRIETARY INSTITUTION:

DALE BEAUTY

ACADEMY

Continuing Education

BEST COPY AVAILABLE



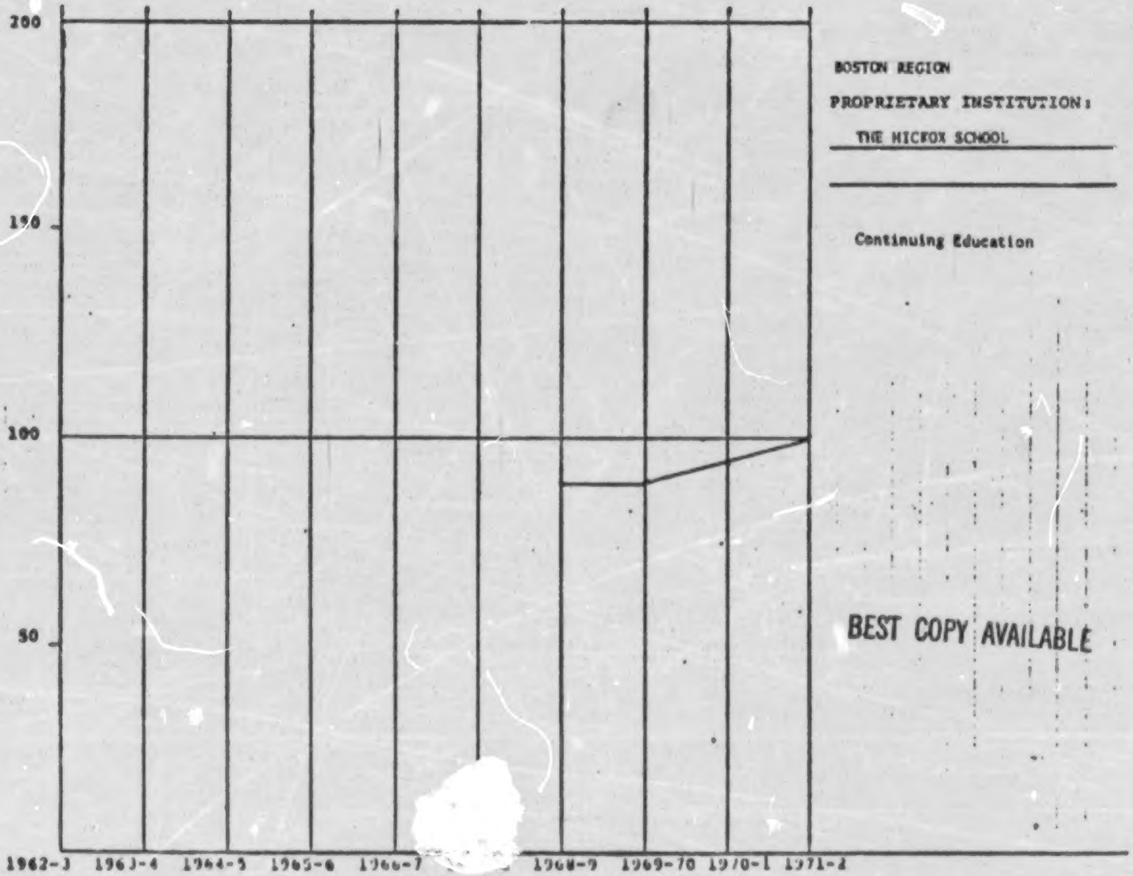
BOSTON REGION

PROPRIETARY INSTITUTION:

DALE BEAUTY

ACADEMY

Part-time



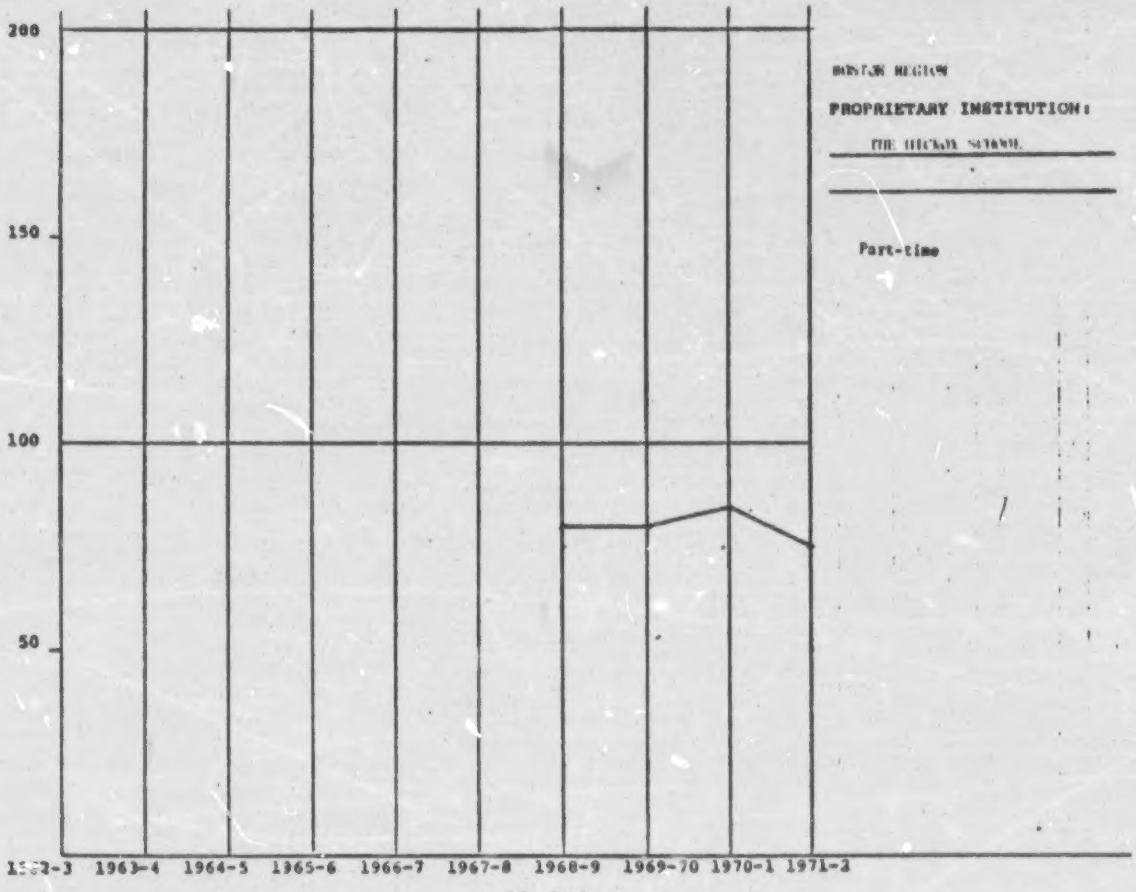
BOSTON REGION

PROPRIETARY INSTITUTION:

THE HICKOX SCHOOL

Continuing Education

BEST COPY AVAILABLE

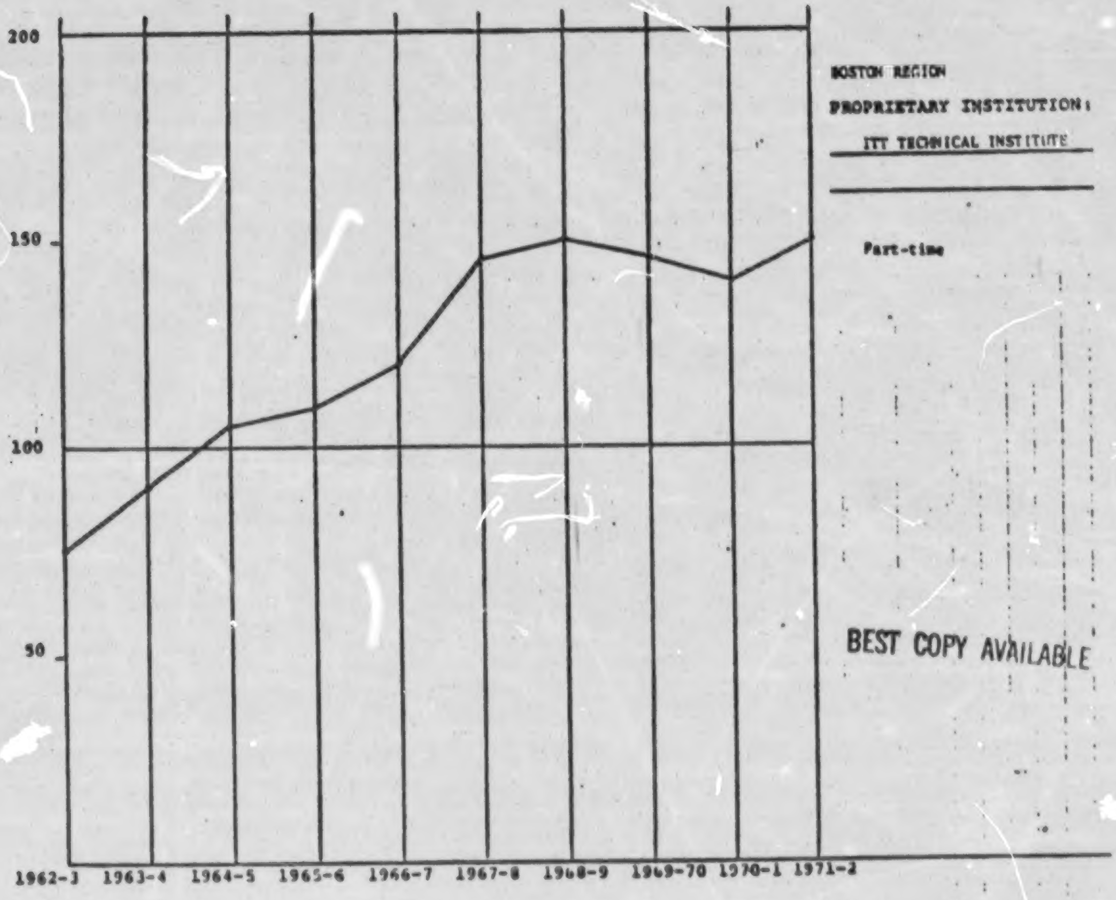


BOSTON REGION

PROPRIETARY INSTITUTION:

THE HICKOX SCHOOL

Part-time



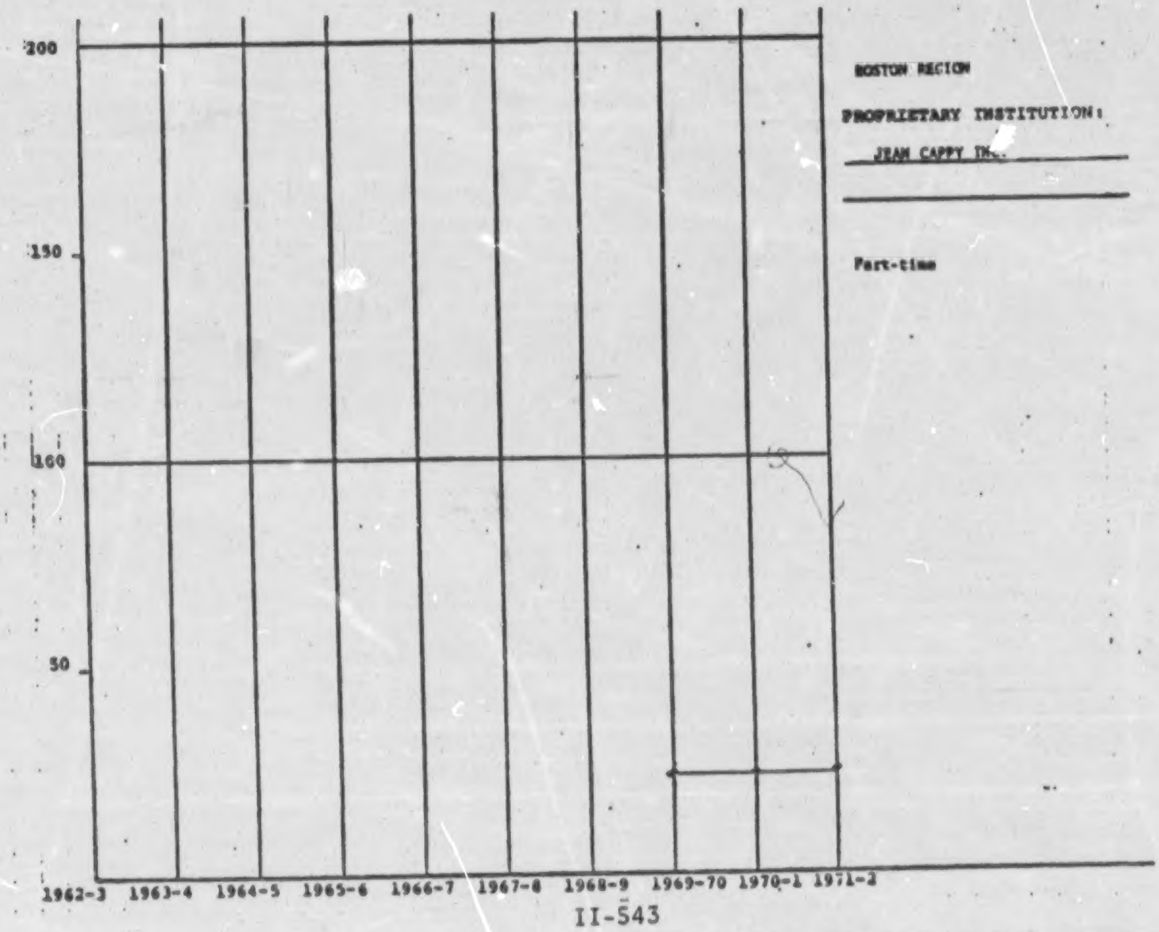
BOSTON REGION

PROPRIETARY INSTITUTION:

ITT TECHNICAL INSTITUTE

Part-time

BEST COPY AVAILABLE

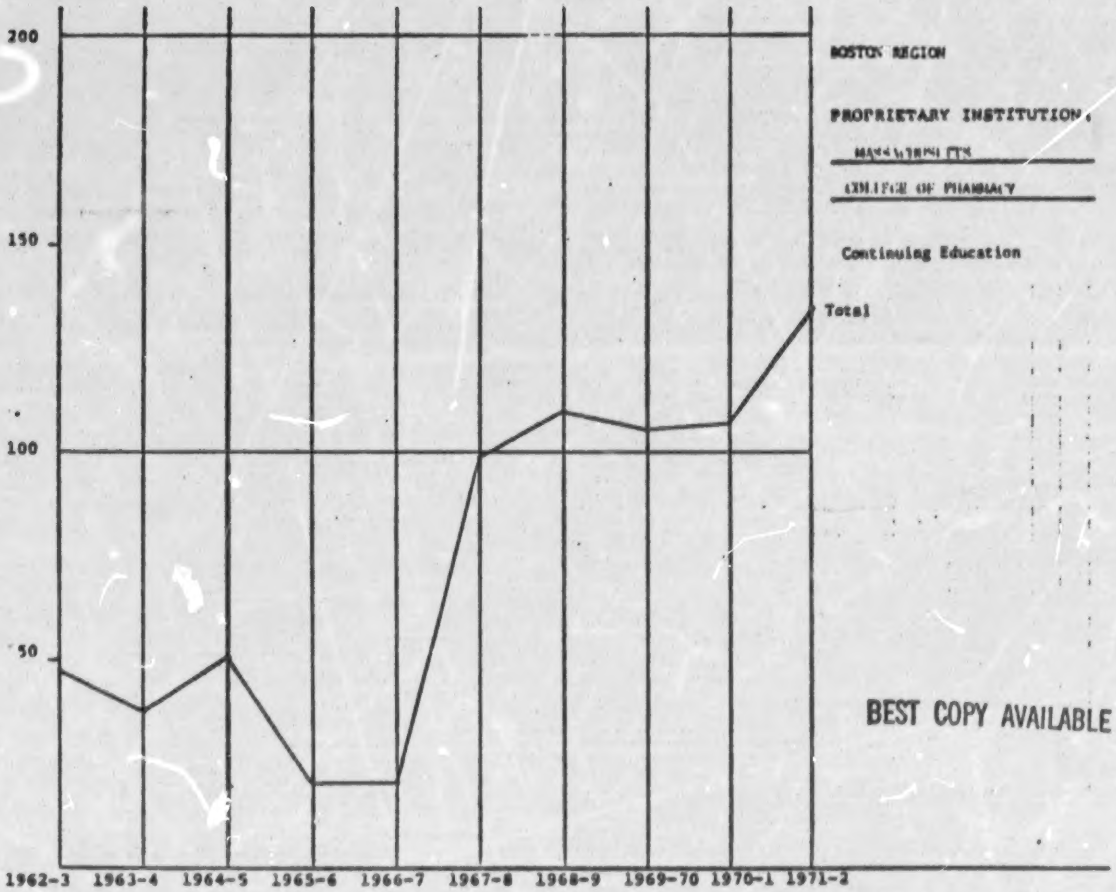


BOSTON REGION

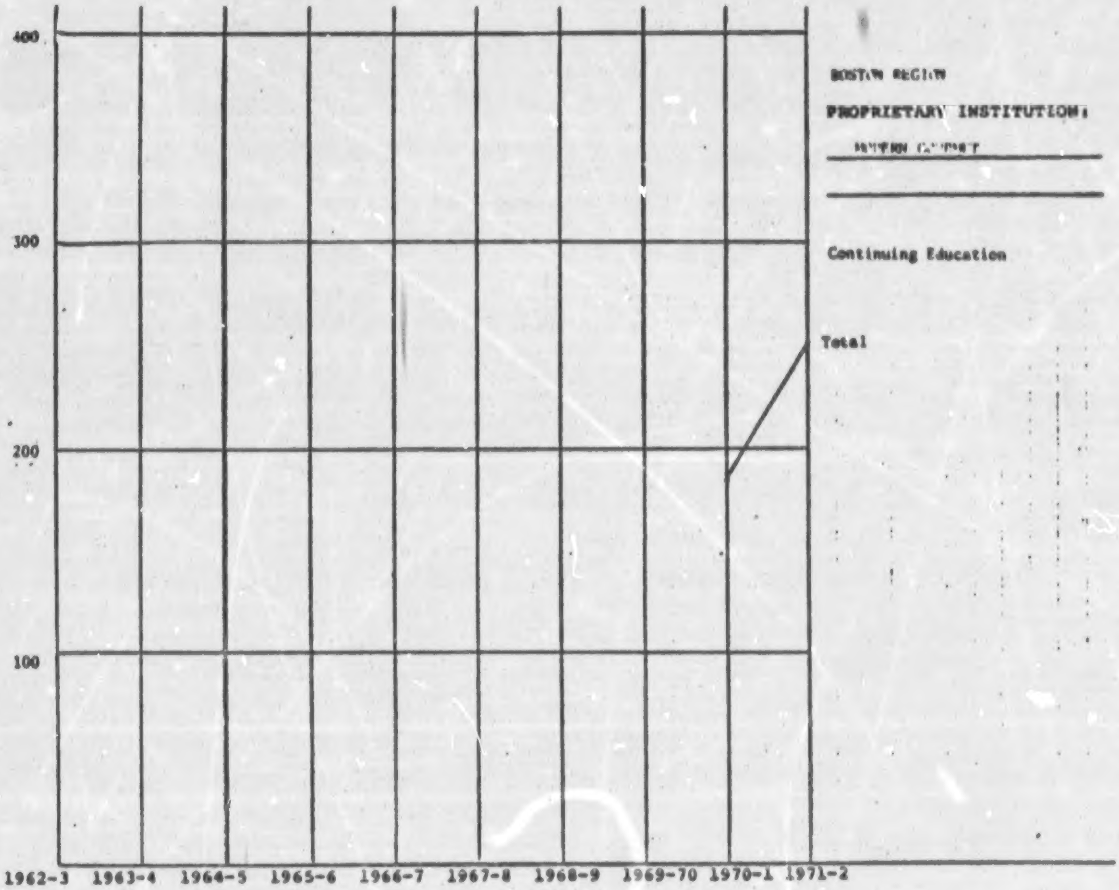
PROPRIETARY INSTITUTION:

JEAN CAPPY INC.

Part-time



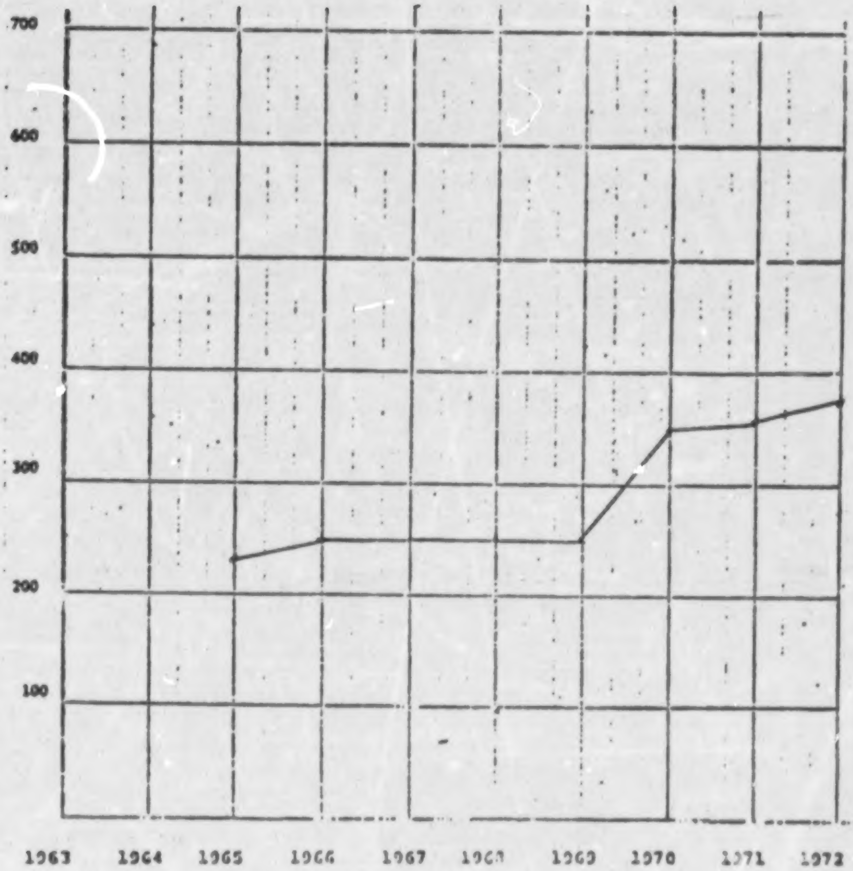
BEST COPY AVAILABLE



BOSTON REGION

INSTITUTION: SCHOOL OF THE MUSEUM OF FINE ARTS

Continuing Education



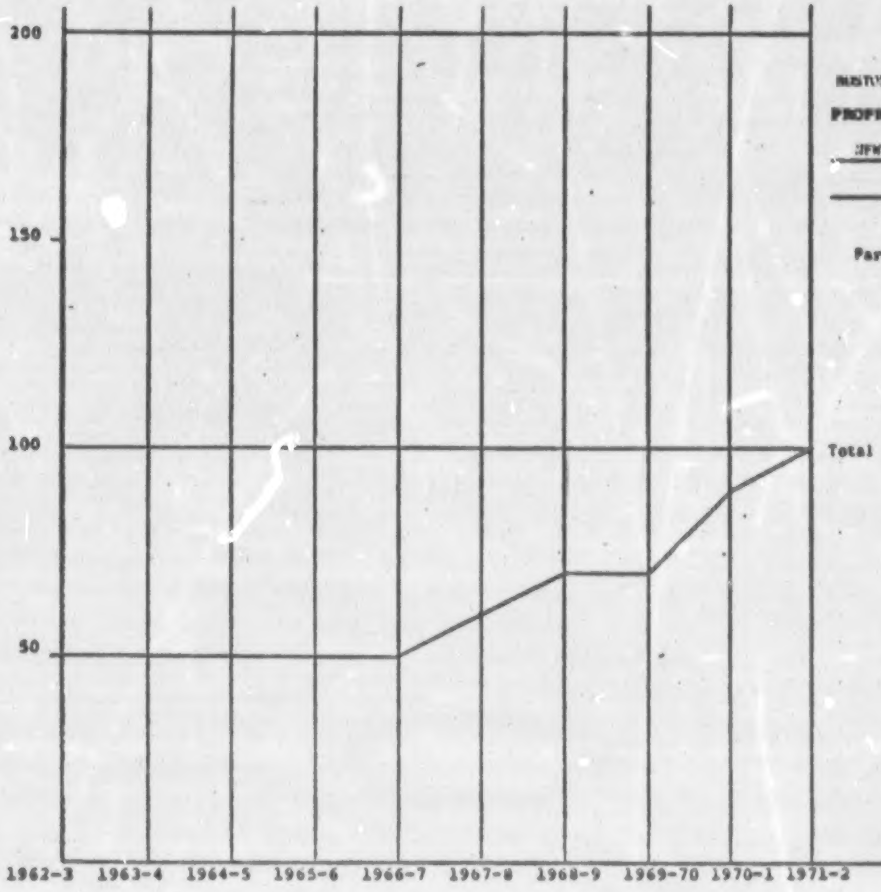
BEST COPY AVAILABLE

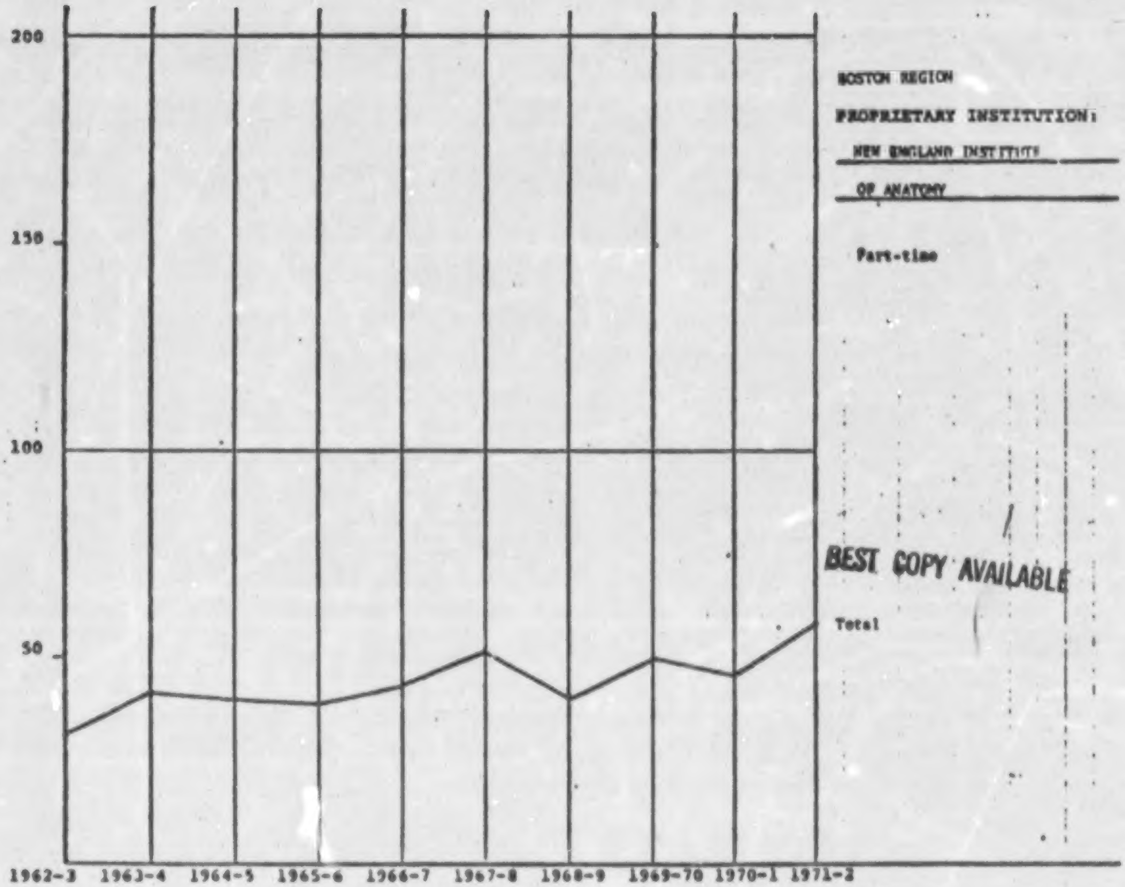
BOSTON REGION

PROPRIETARY INSTITUTION:

NEW ENGLAND EDUCATIONAL CENTER

Part-time





BOSTON REGION

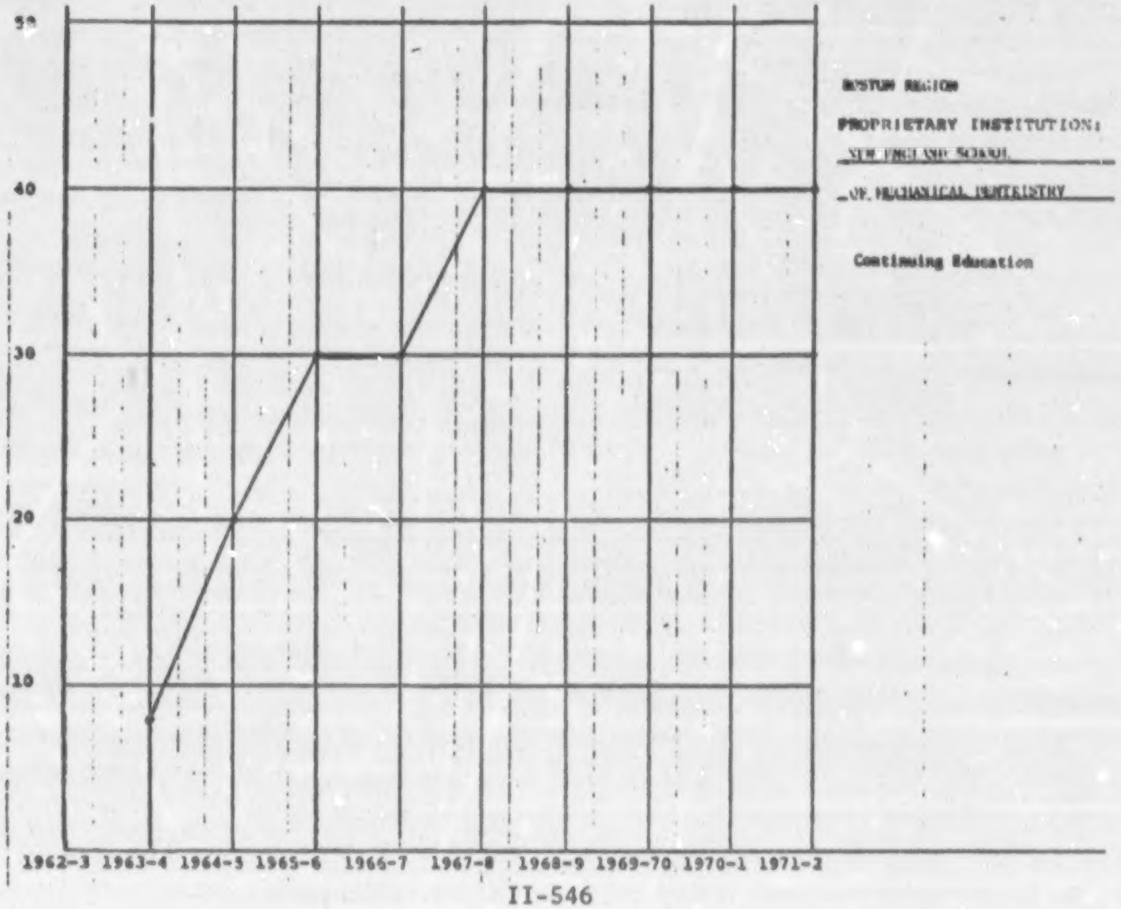
PROPRIETARY INSTITUTION:

NEW ENGLAND INSTITUTE

OF ANATOMY

Part-time

BEST COPY AVAILABLE



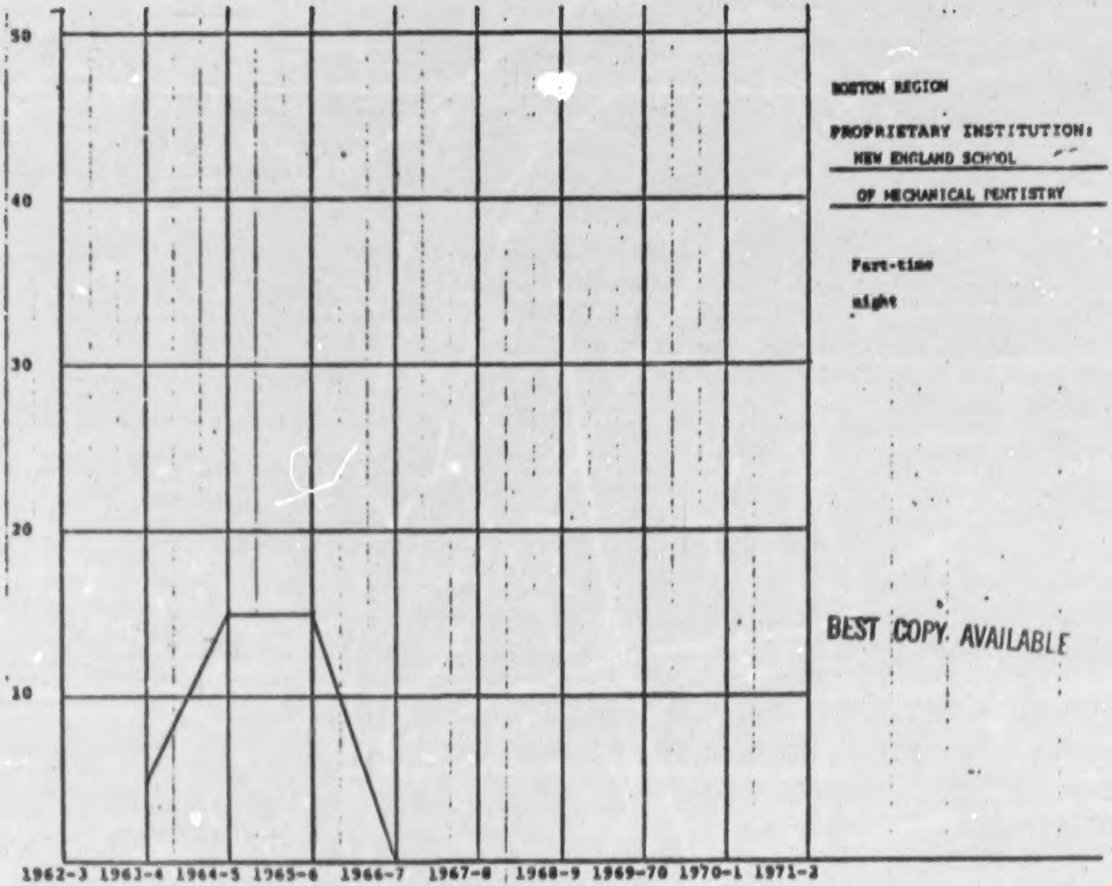
BOSTON REGION

PROPRIETARY INSTITUTION:

NEW ENGLAND SCHOOL

OF MECHANICAL DENTISTRY

Continuing Education

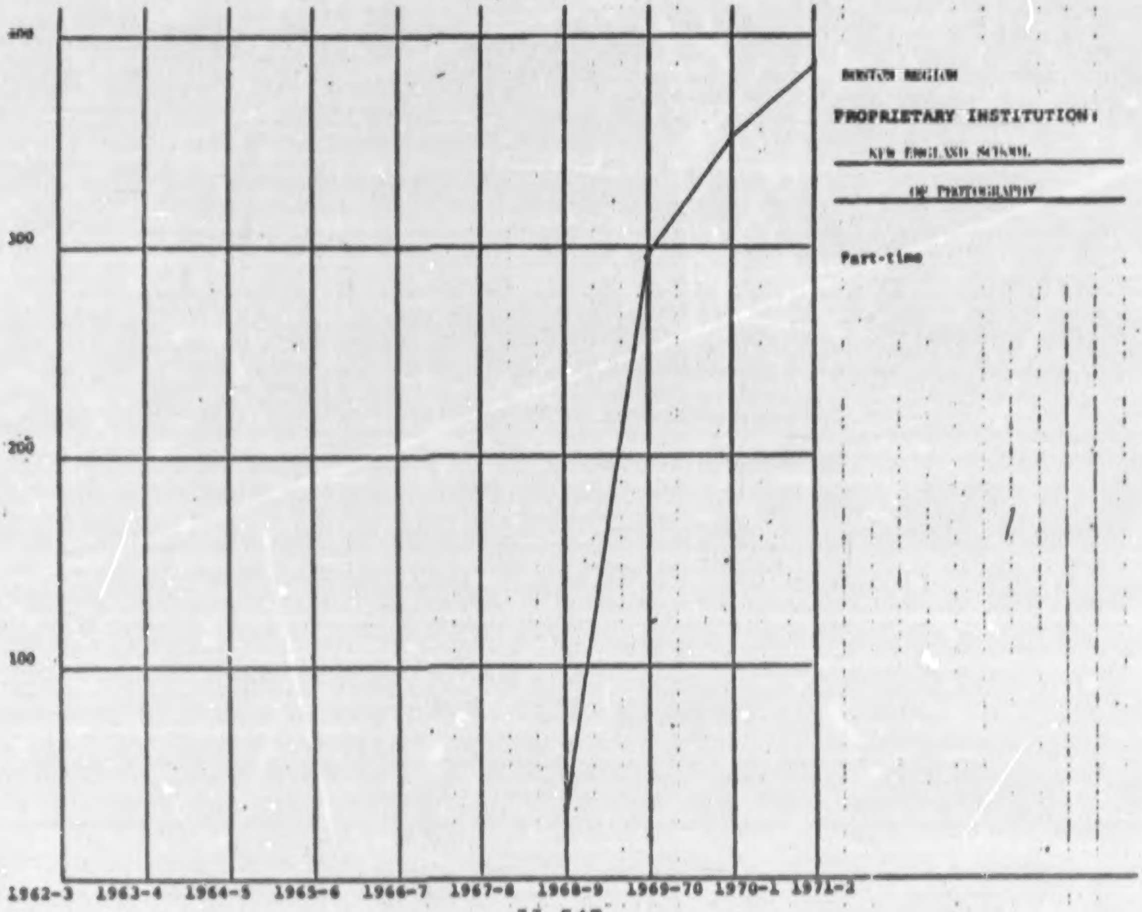


BOSTON REGION

PROPRIETARY INSTITUTION:
NEW ENGLAND SCHOOL
OF MECHANICAL DENTISTRY

Part-time
night

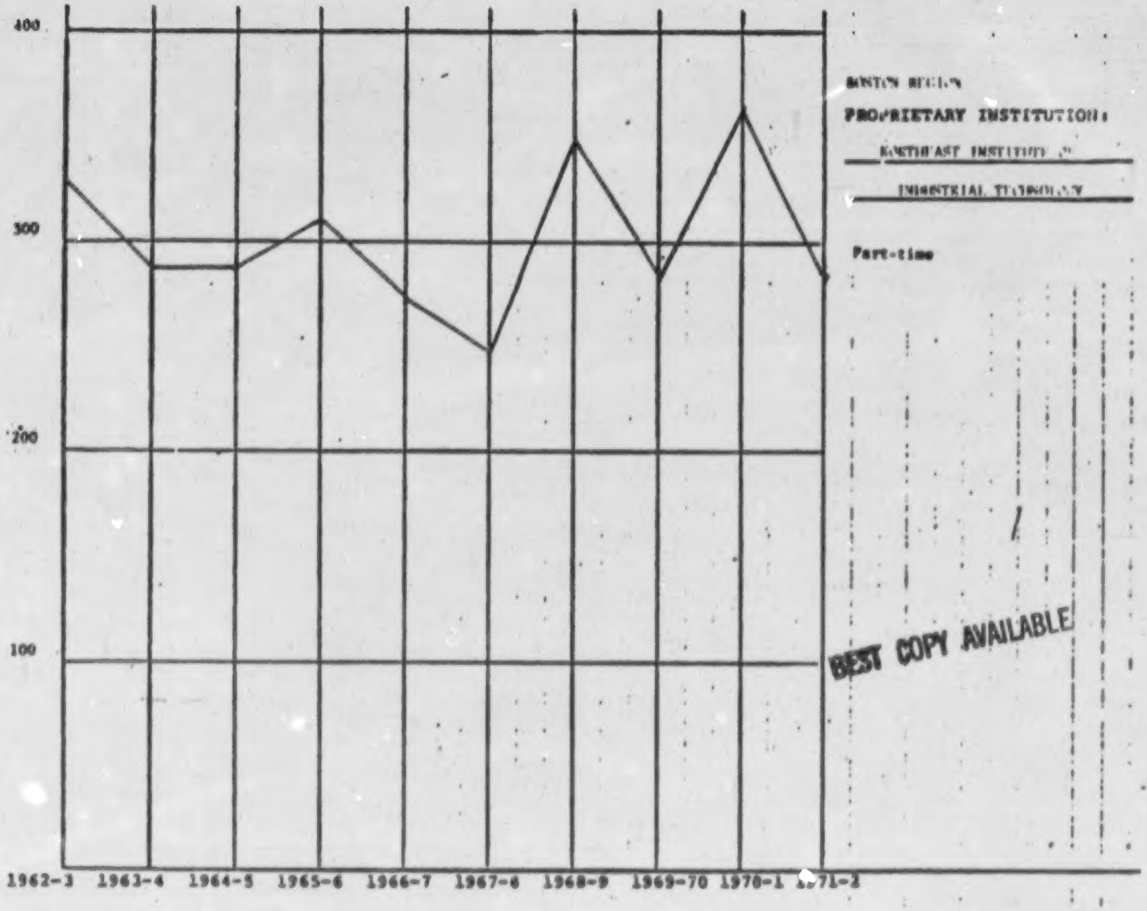
BEST COPY AVAILABLE



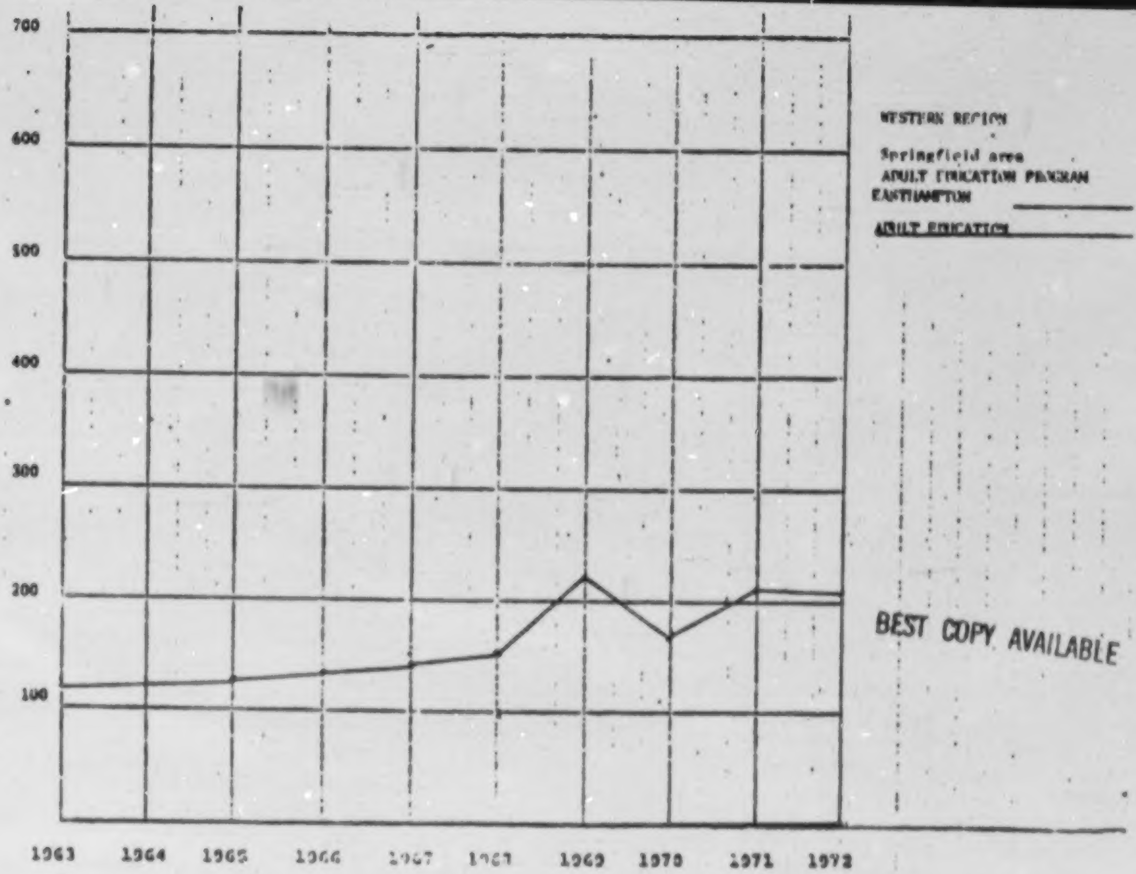
BOSTON REGION

PROPRIETARY INSTITUTION:
NEW ENGLAND SCHOOL
OF PHOTOGRAPHY

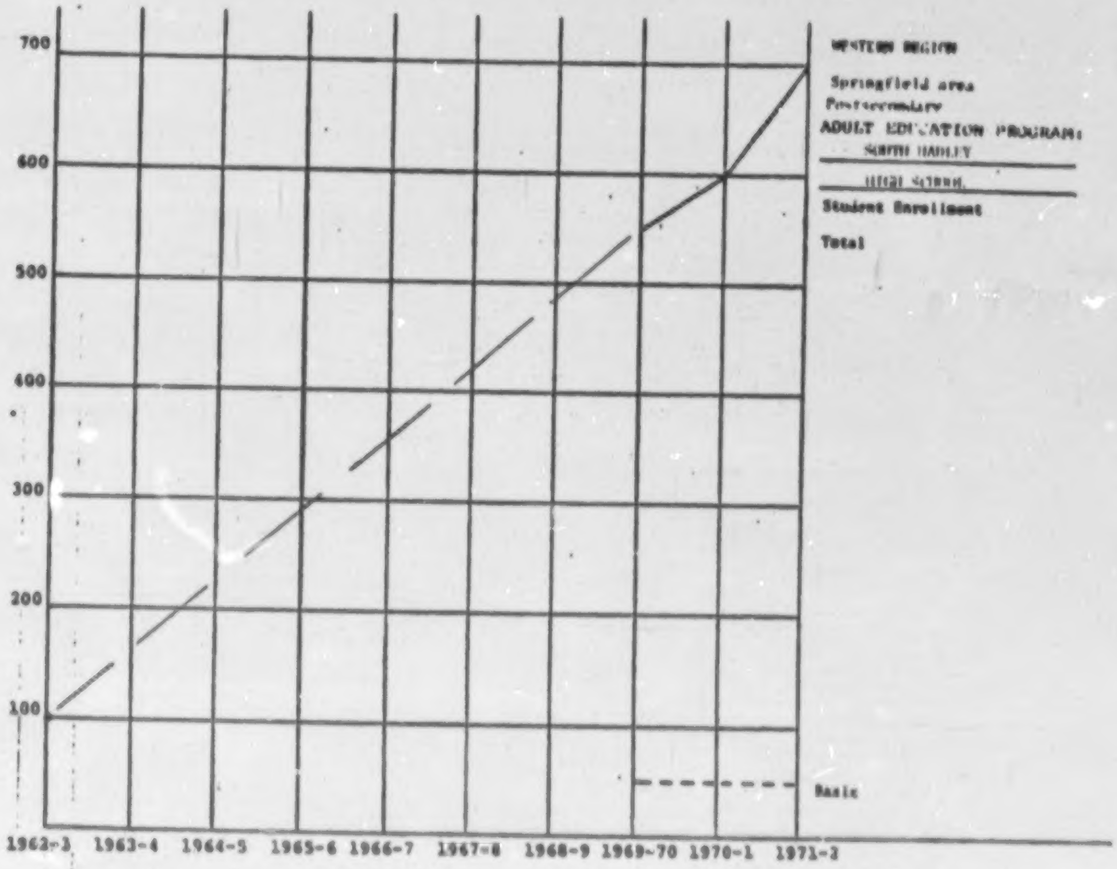
Part-time

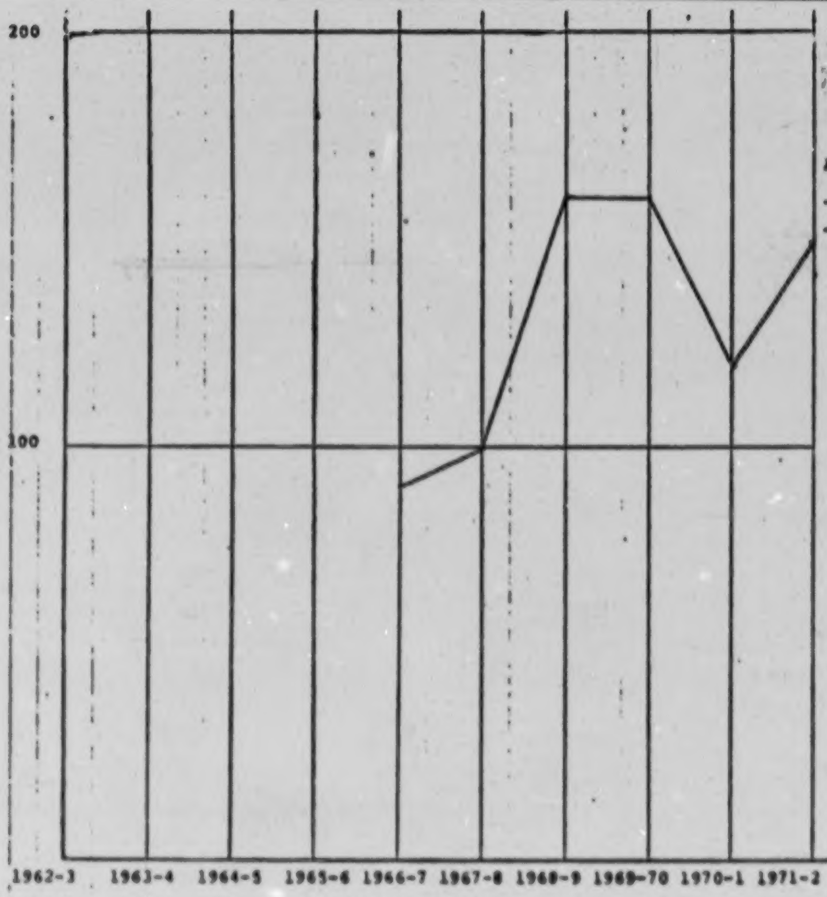


BEST COPY AVAILABLE



BEST COPY AVAILABLE





WESTERN REGION

Springfield area

ADULT EDUCATION PROGRAM:

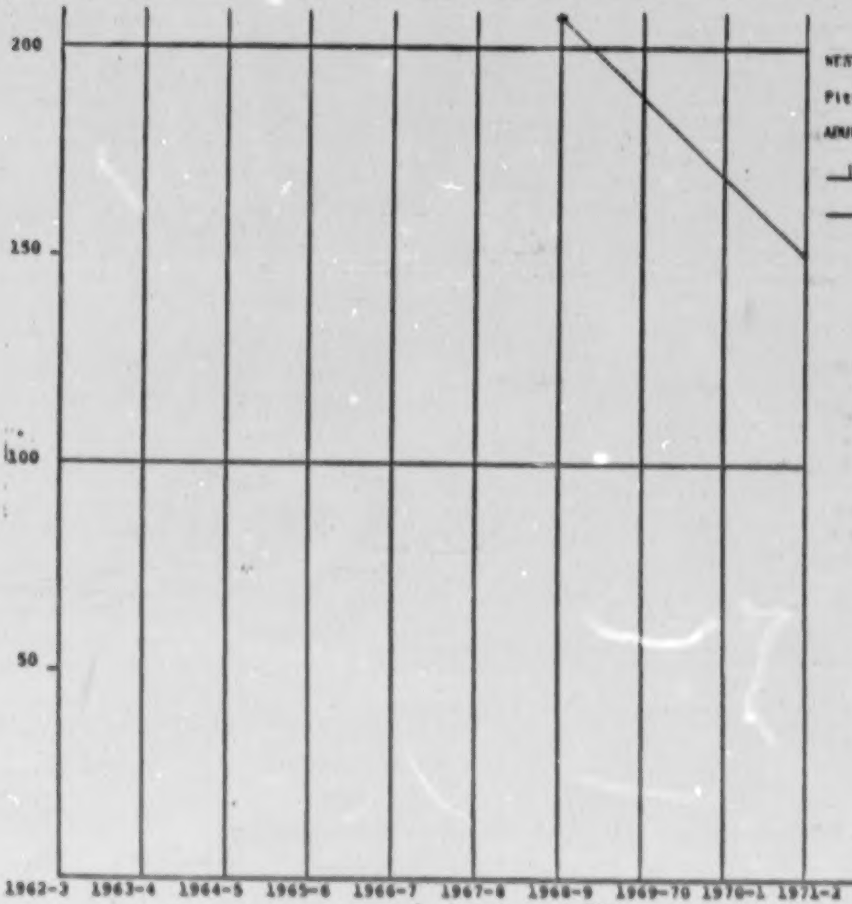
SOUTHWICK

HIGH SCHOOL

Student Enrollment

Postsecondary

BEST COPY AVAILABLE

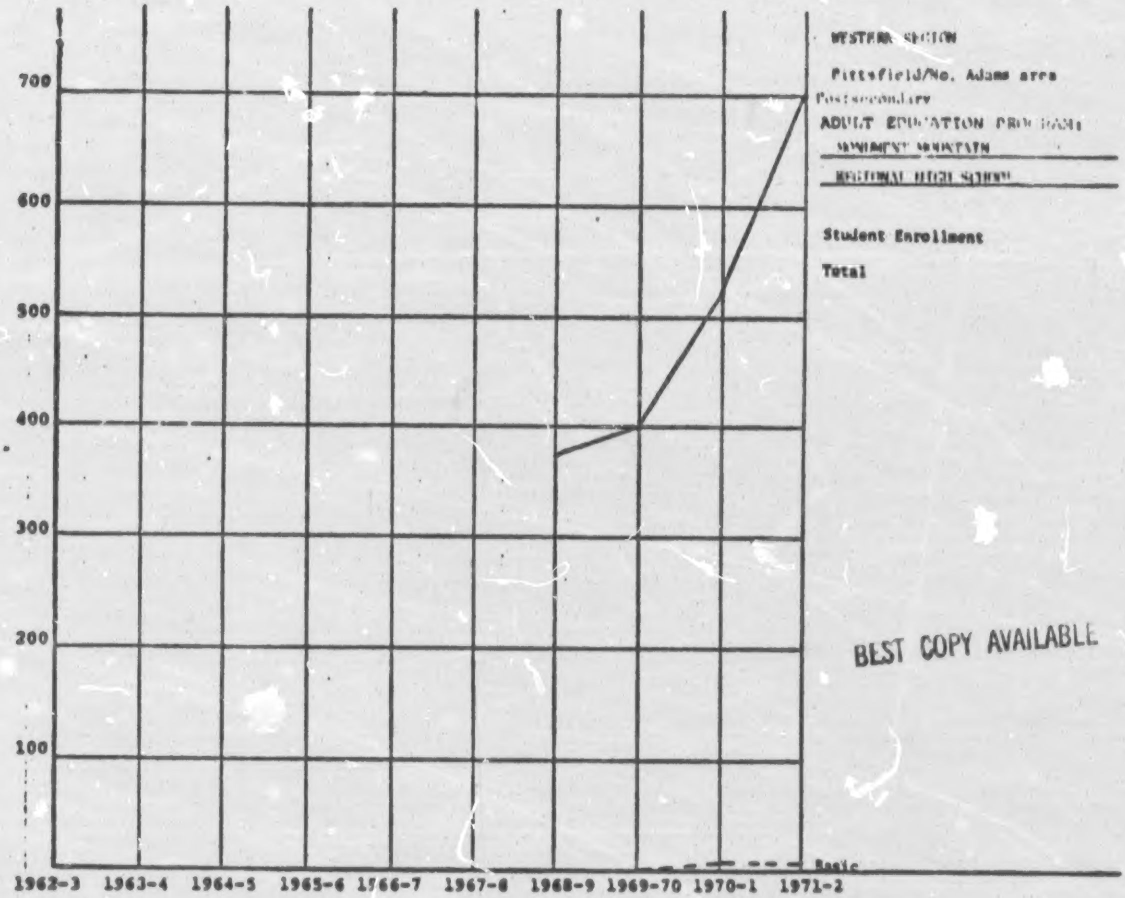


WESTERN REGION

Pittsfield/No. Adams area

ADULT EDUCATION PROGRAM

LEE HIGH SCHOOL



WESTERN SECTION

Pittsfield/No. Adams area

ADULT EDUCATION PROGRAM:

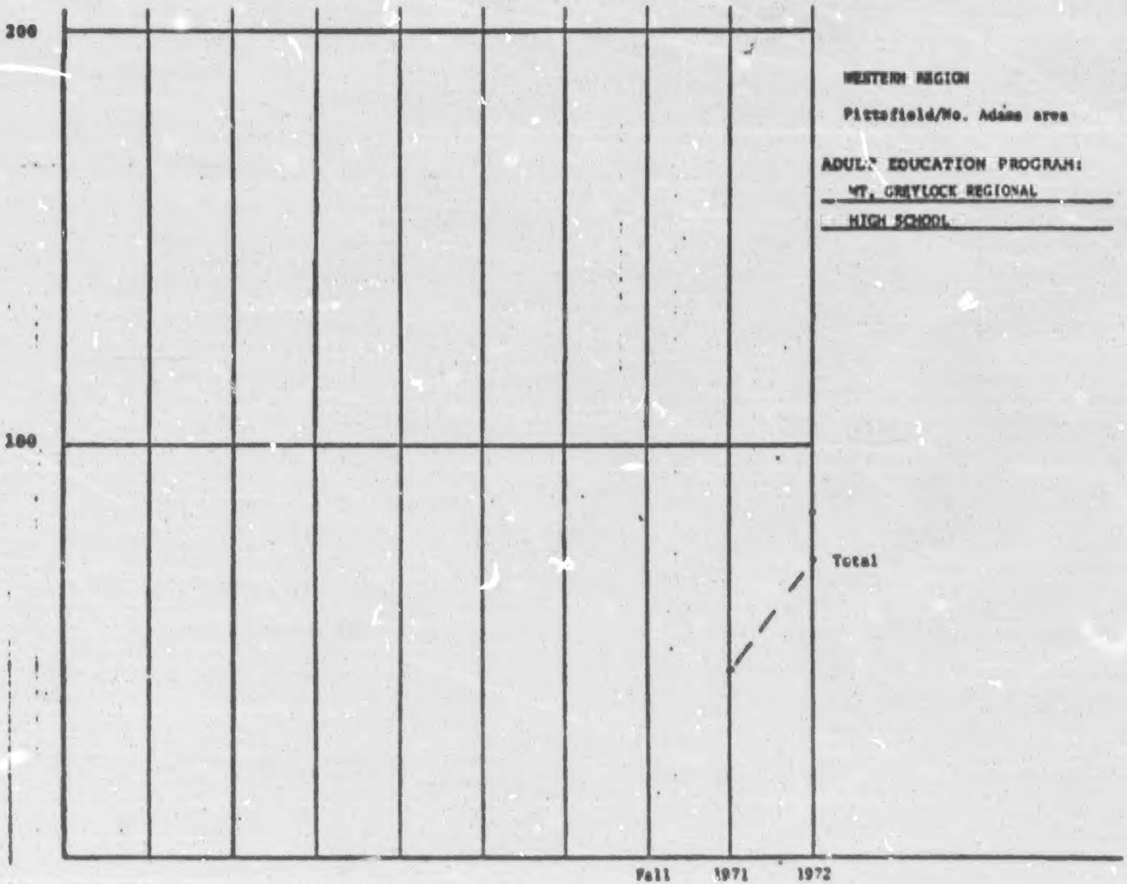
MONUMENT MOUNTAIN

REGIONAL HIGH SCHOOL

Student Enrollment

Total

BEST COPY AVAILABLE



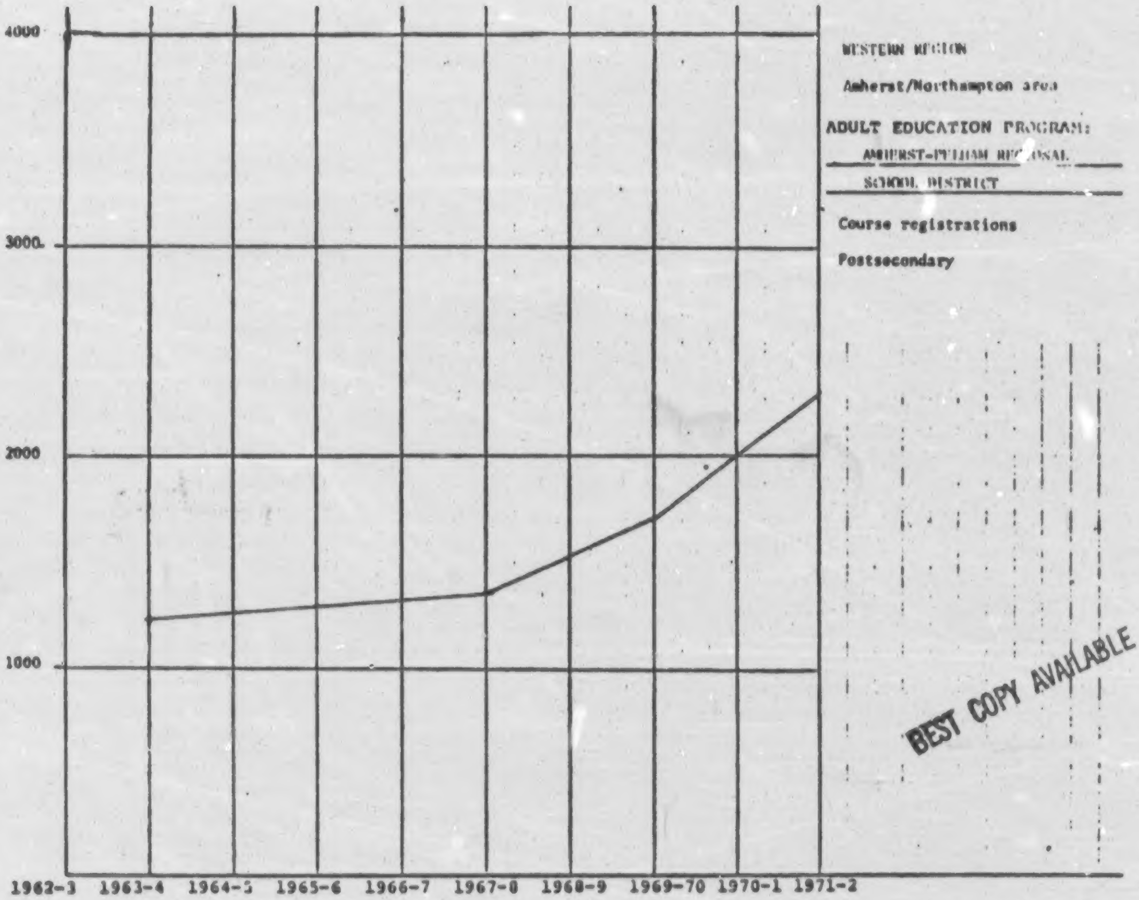
WESTERN REGION

Pittsfield/No. Adams area

ADULT EDUCATION PROGRAM:

MT. GREYLOCK REGIONAL

HIGH SCHOOL



WESTERN REGION

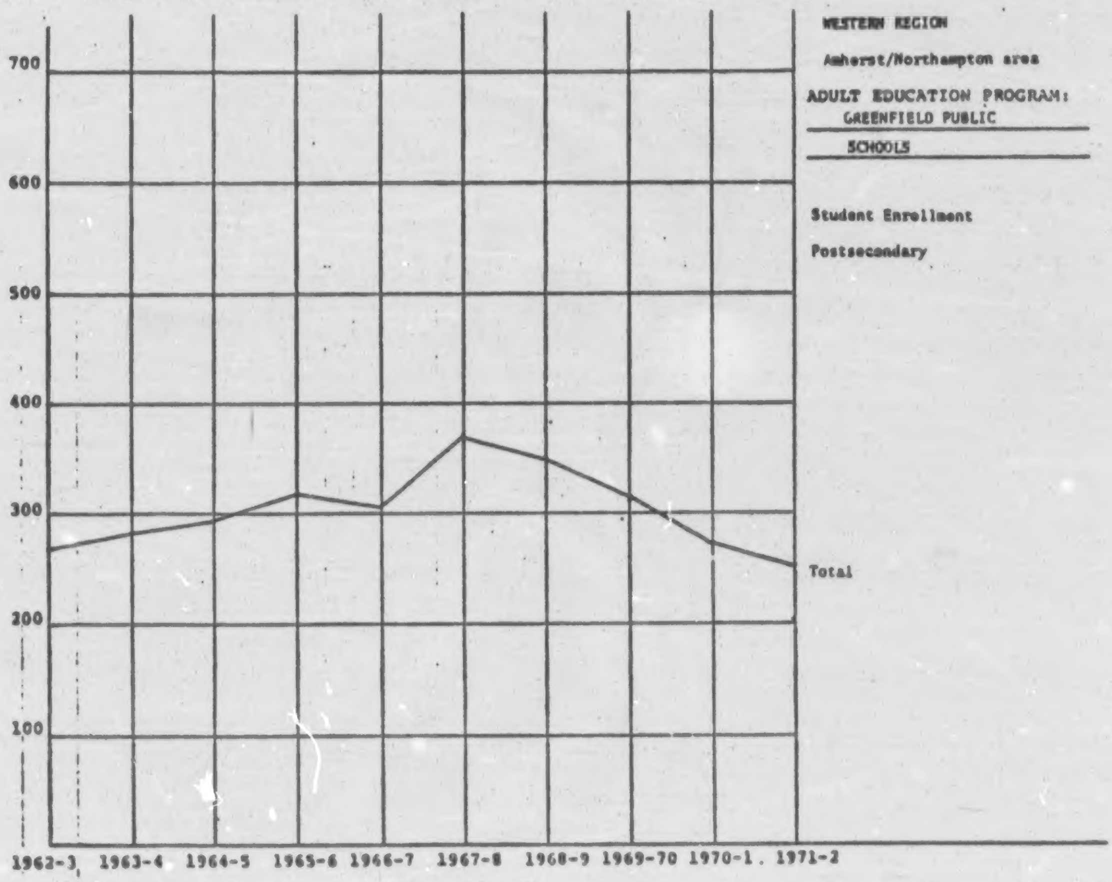
Amherst/Northampton area

ADULT EDUCATION PROGRAM:
AMHERST-PELHAM REGIONAL
SCHOOL DISTRICT

Course registrations

Postsecondary

BEST COPY AVAILABLE



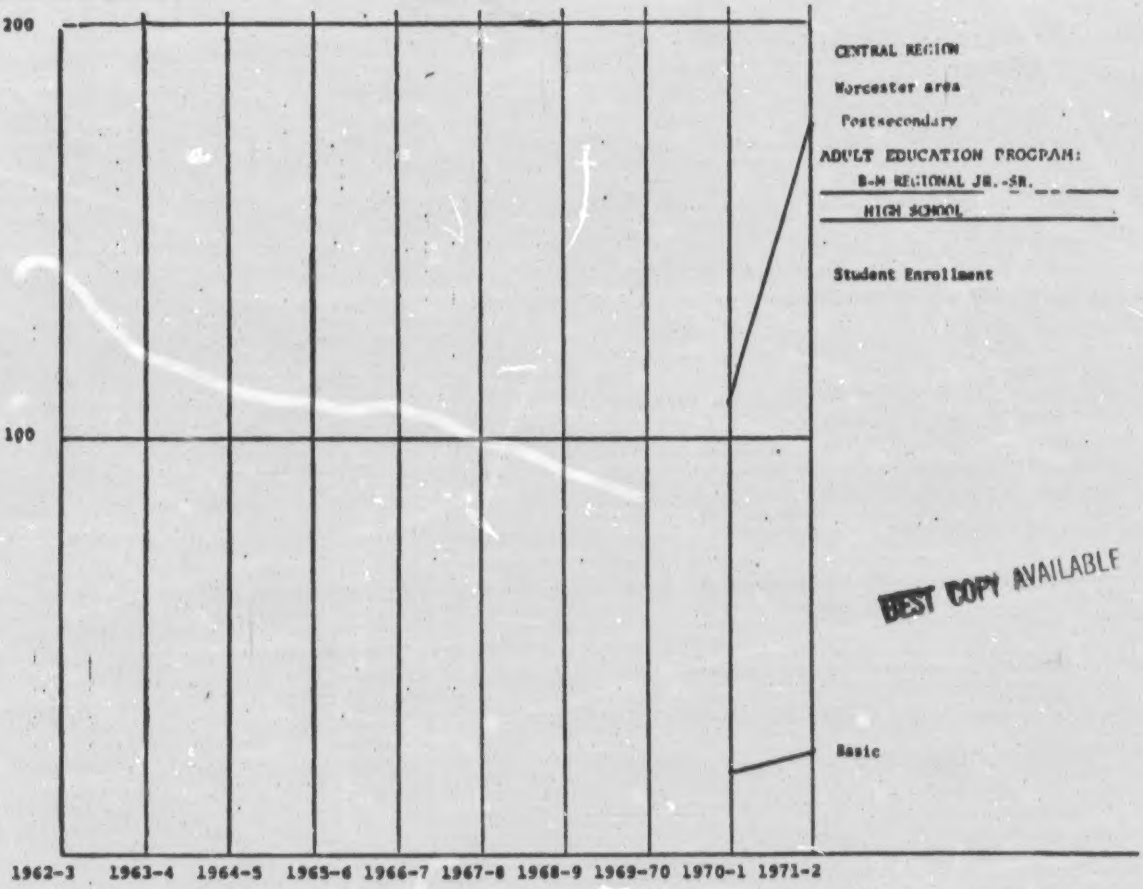
WESTERN REGION

Amherst/Northampton area

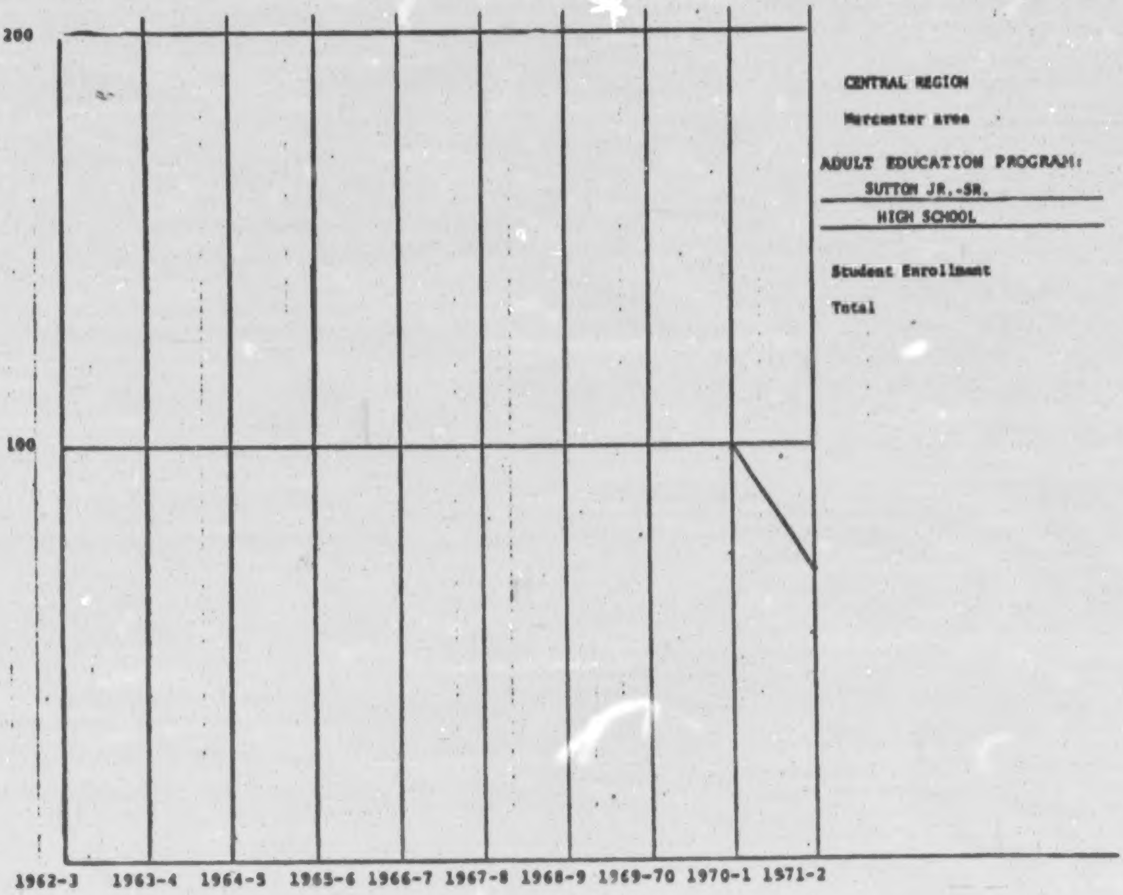
ADULT EDUCATION PROGRAM:
GREENFIELD PUBLIC
SCHOOLS

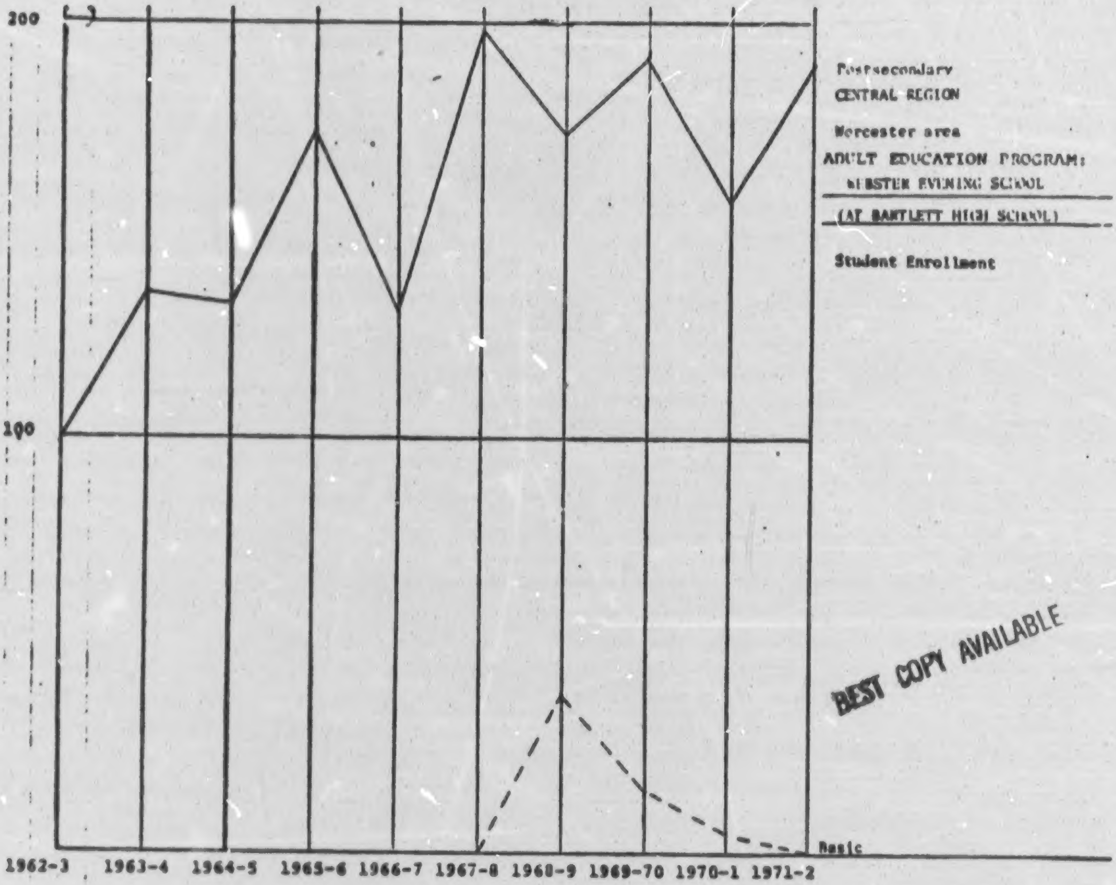
Student Enrollment

Postsecondary

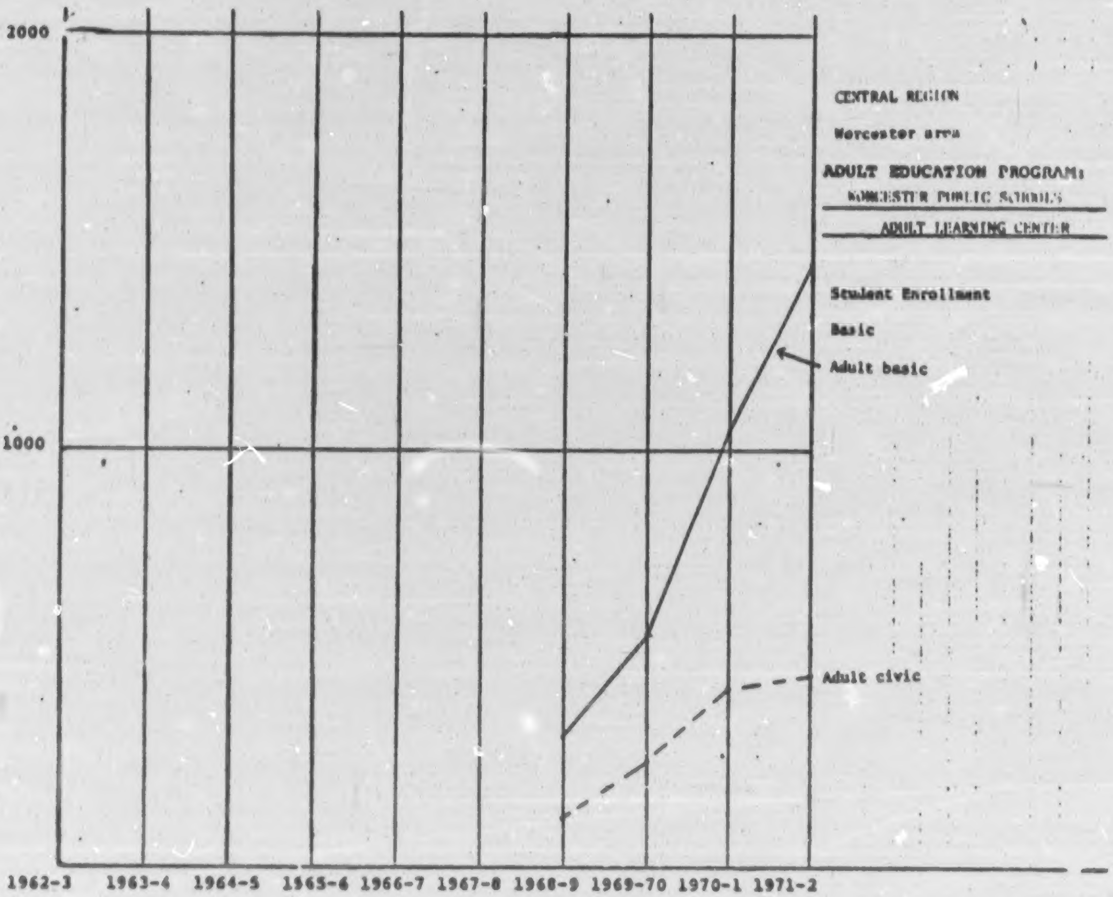


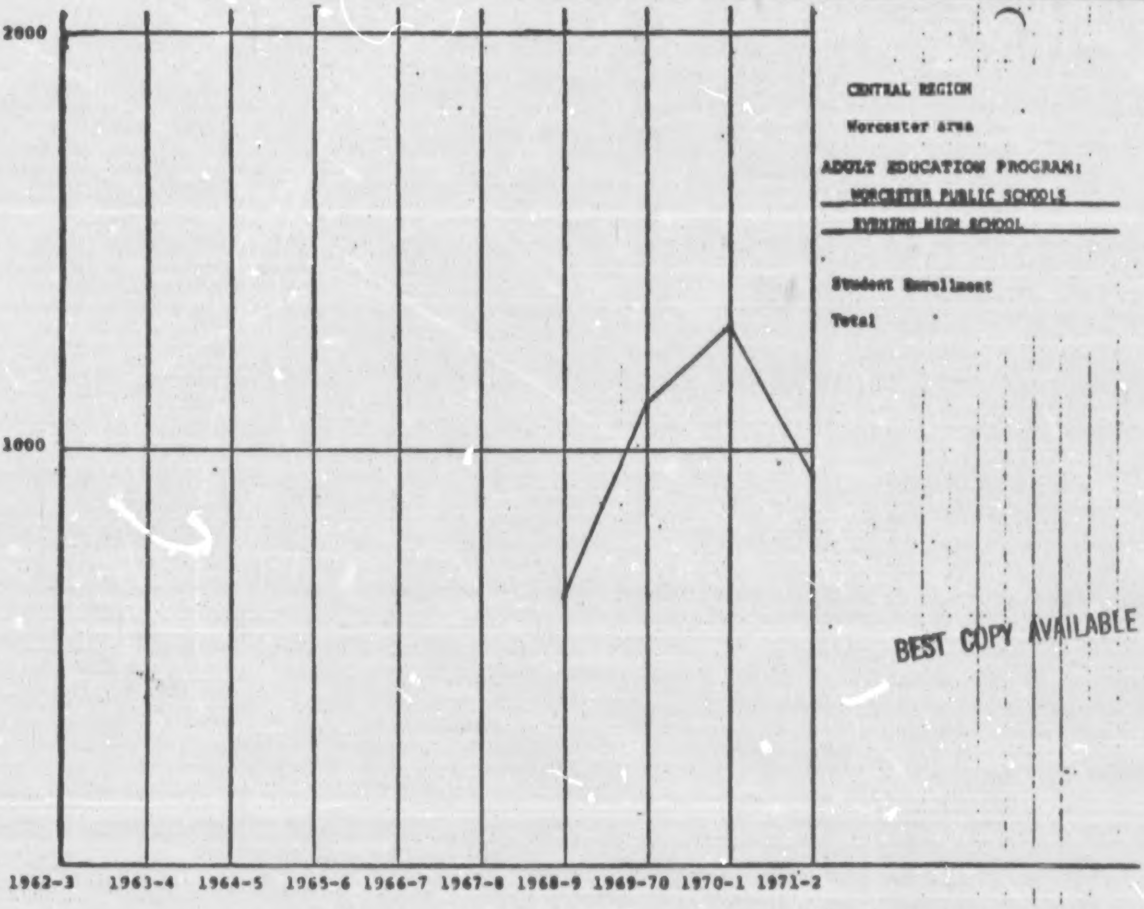
BEST COPY AVAILABLE





BEST COPY AVAILABLE





CENTRAL REGION

Worcester area

ADULT EDUCATION PROGRAM:

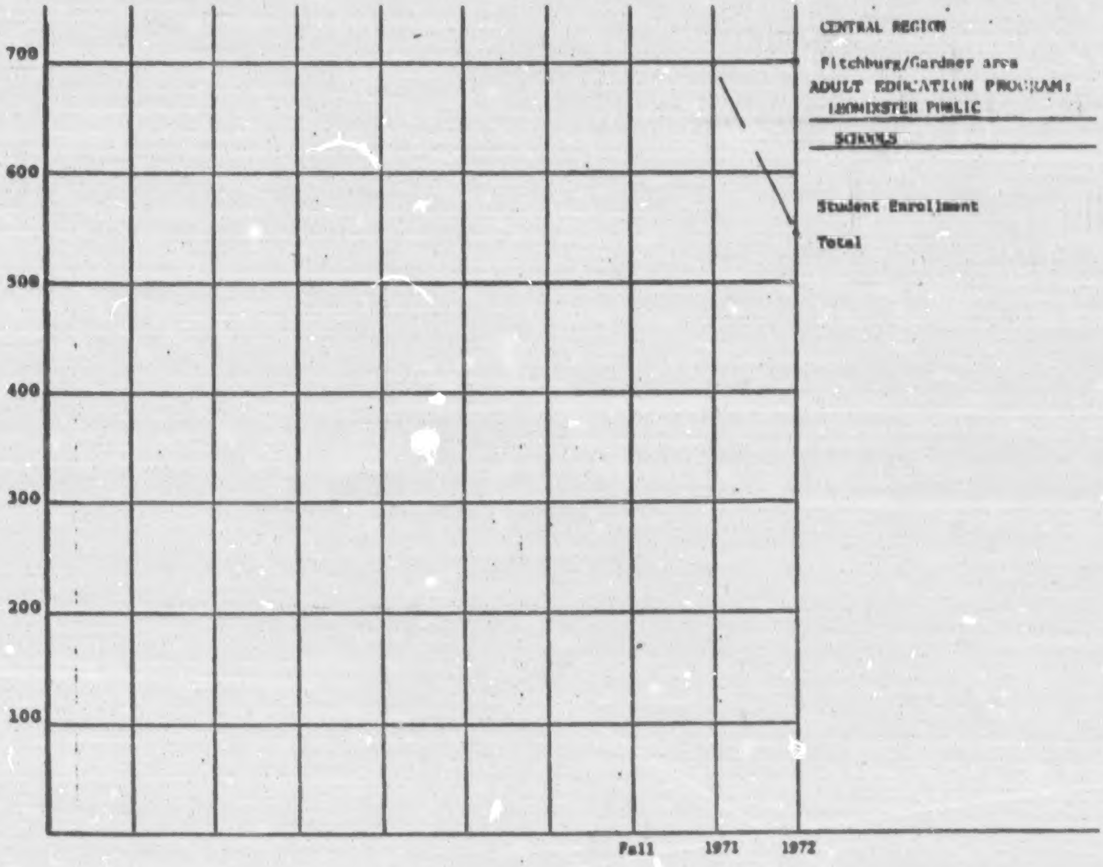
WORCESTER PUBLIC SCHOOLS

EVENING HIGH SCHOOL

Student Enrollment

Total

BEST COPY AVAILABLE



CENTRAL REGION

Fitchburg/Gardner area

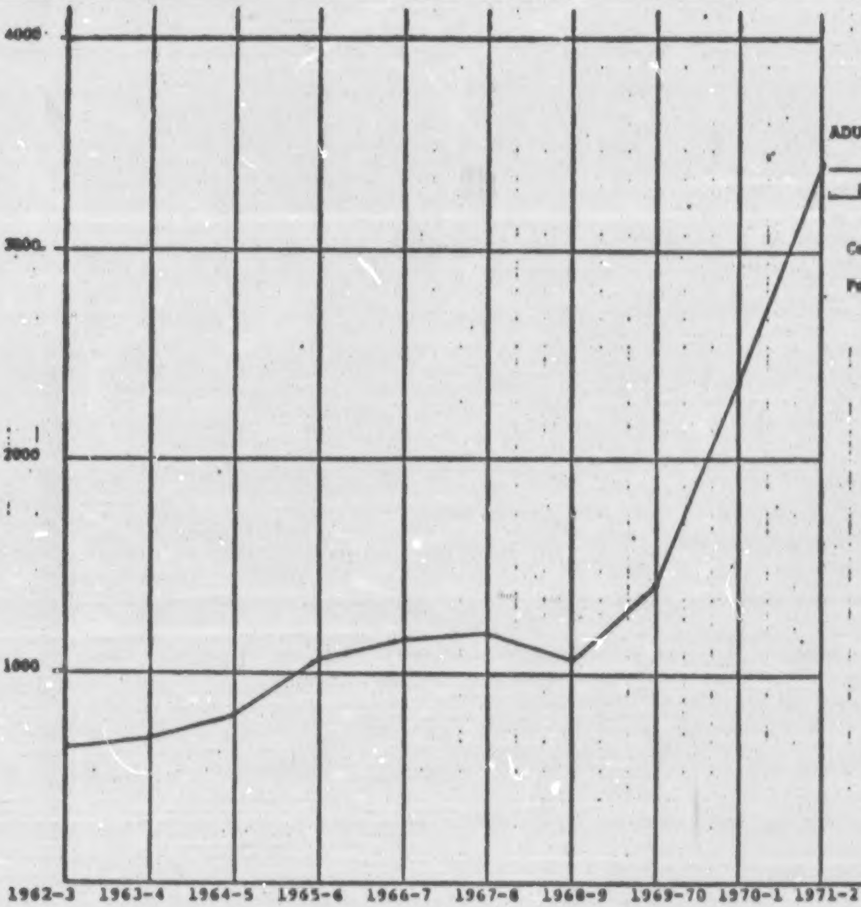
ADULT EDUCATION PROGRAM:

LEOMINSTER PUBLIC

SCHOOLS

Student Enrollment

Total



CENTRAL REGION

Framingham area

ADULT EDUCATION PROGRAM:

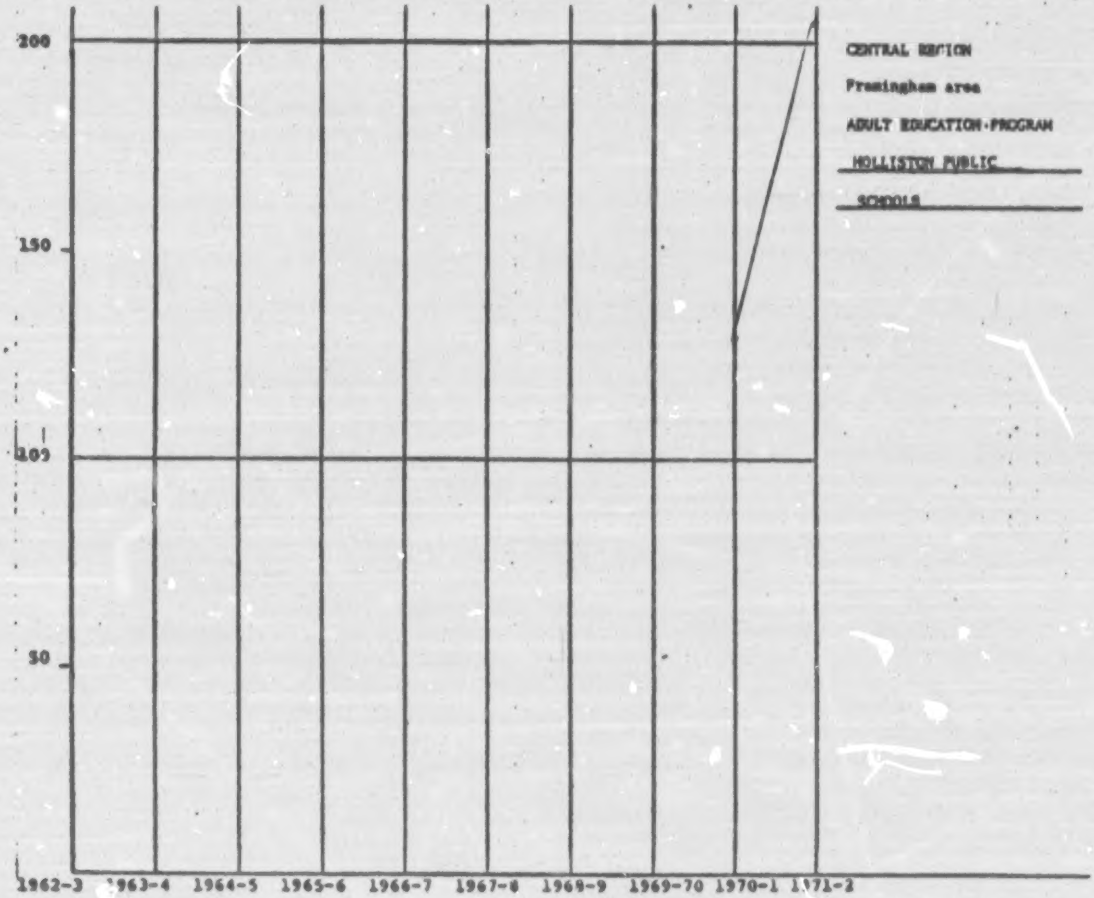
CONCORD-CARLISLE

REGIONAL SCHOOL DISTRICT

Course Registrations

Postsecondary

BEST COPY AVAILABLE



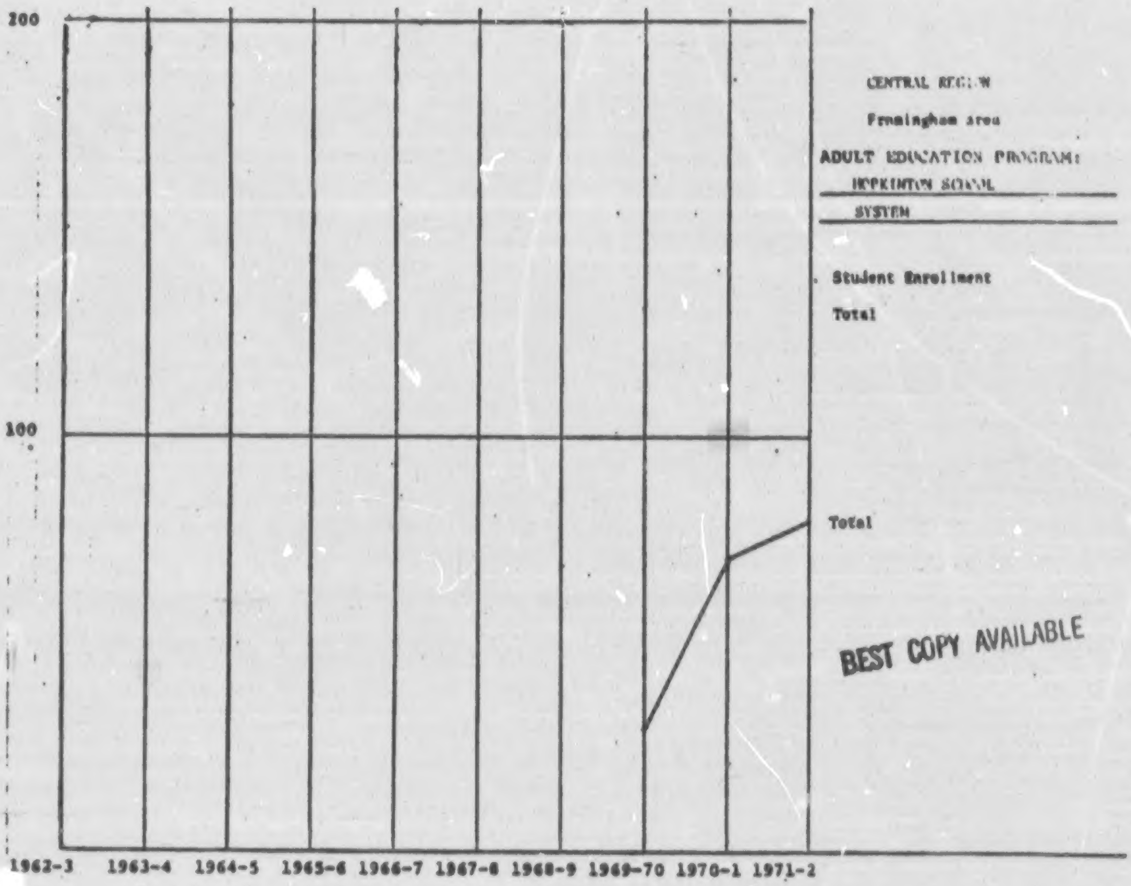
CENTRAL REGION

Framingham area

ADULT EDUCATION PROGRAM

HOLLISTON PUBLIC

SCHOOLS



CENTRAL REGION

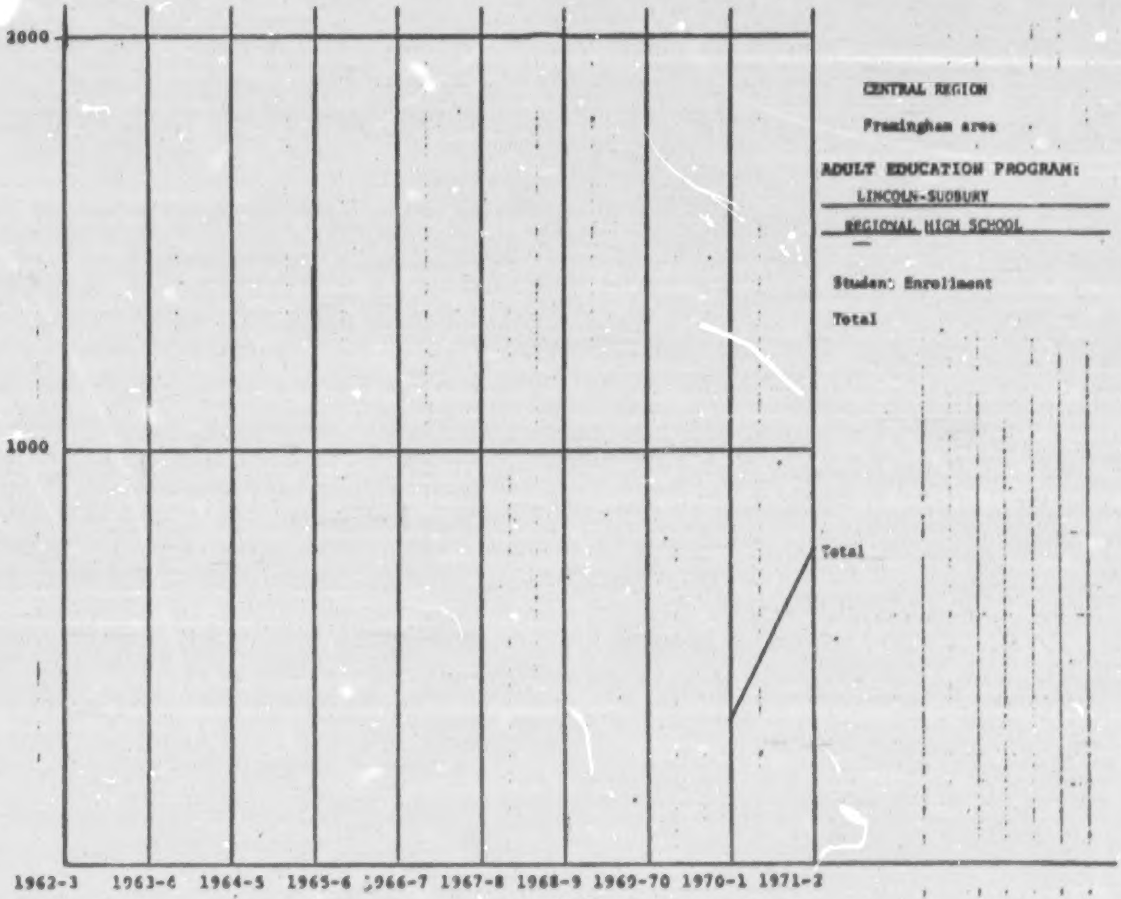
Framingham area

ADULT EDUCATION PROGRAM:
HOPKINTON SCHOOL
SYSTEM

Student Enrollment

Total

BEST COPY AVAILABLE



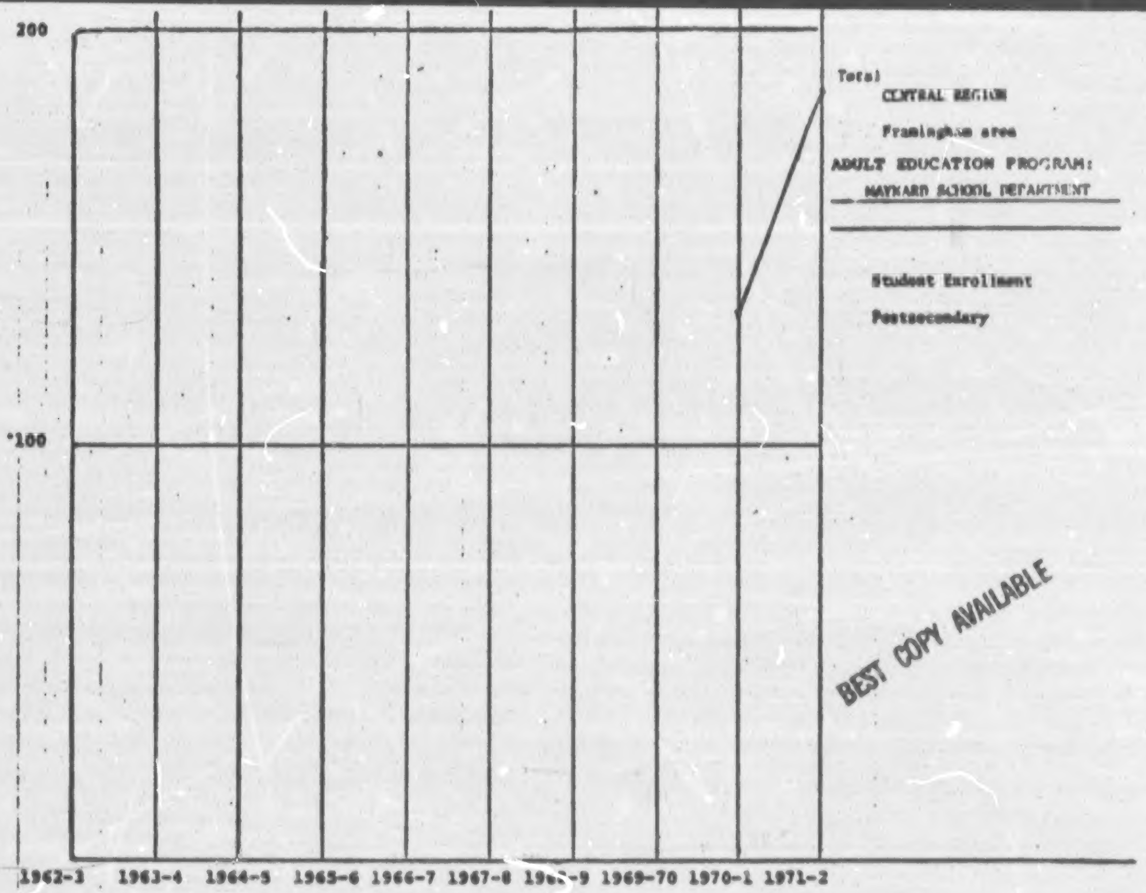
CENTRAL REGION

Framingham area

ADULT EDUCATION PROGRAM:
LINCOLN-SUDBURY
REGIONAL HIGH SCHOOL

Student Enrollment

Total



CENTRAL REGION

Framingham area

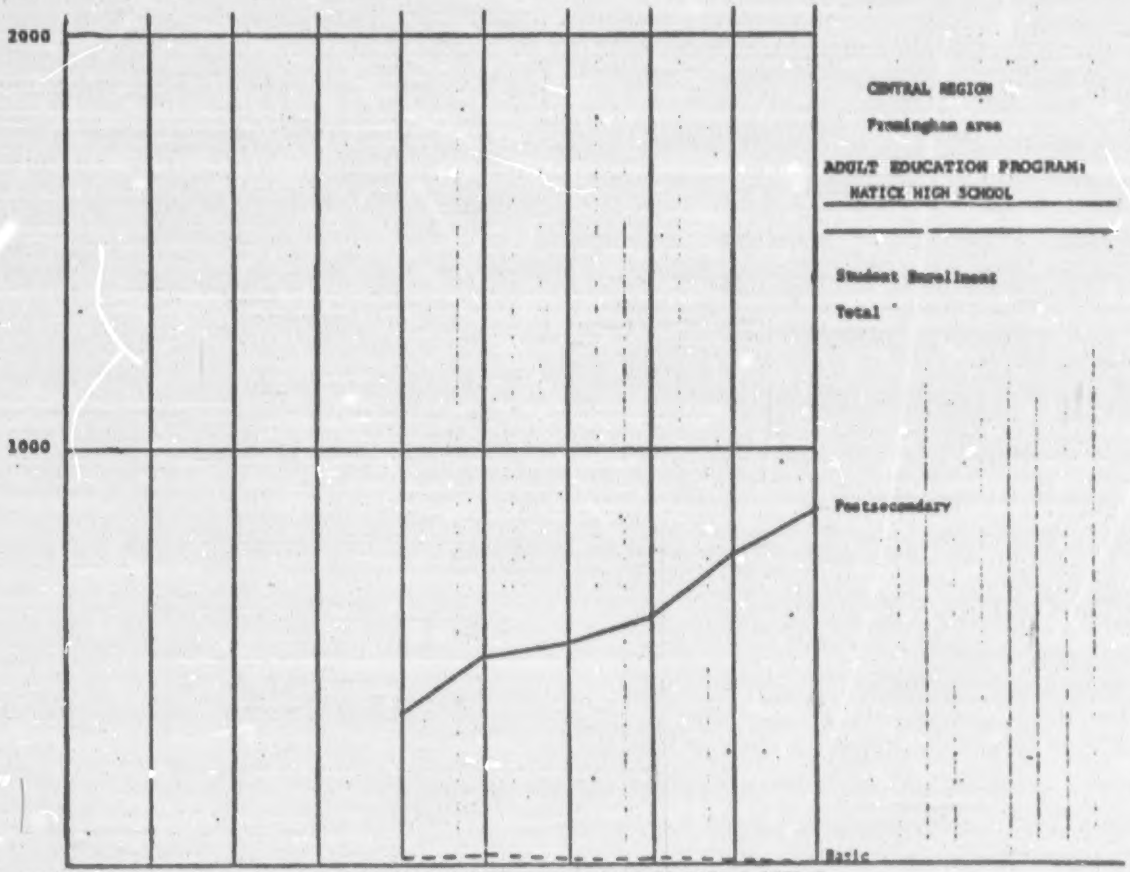
ADULT EDUCATION PROGRAM:

MAYNARD SCHOOL DEPARTMENT

Student Enrollment

Postsecondary

BEST COPY AVAILABLE



CENTRAL REGION

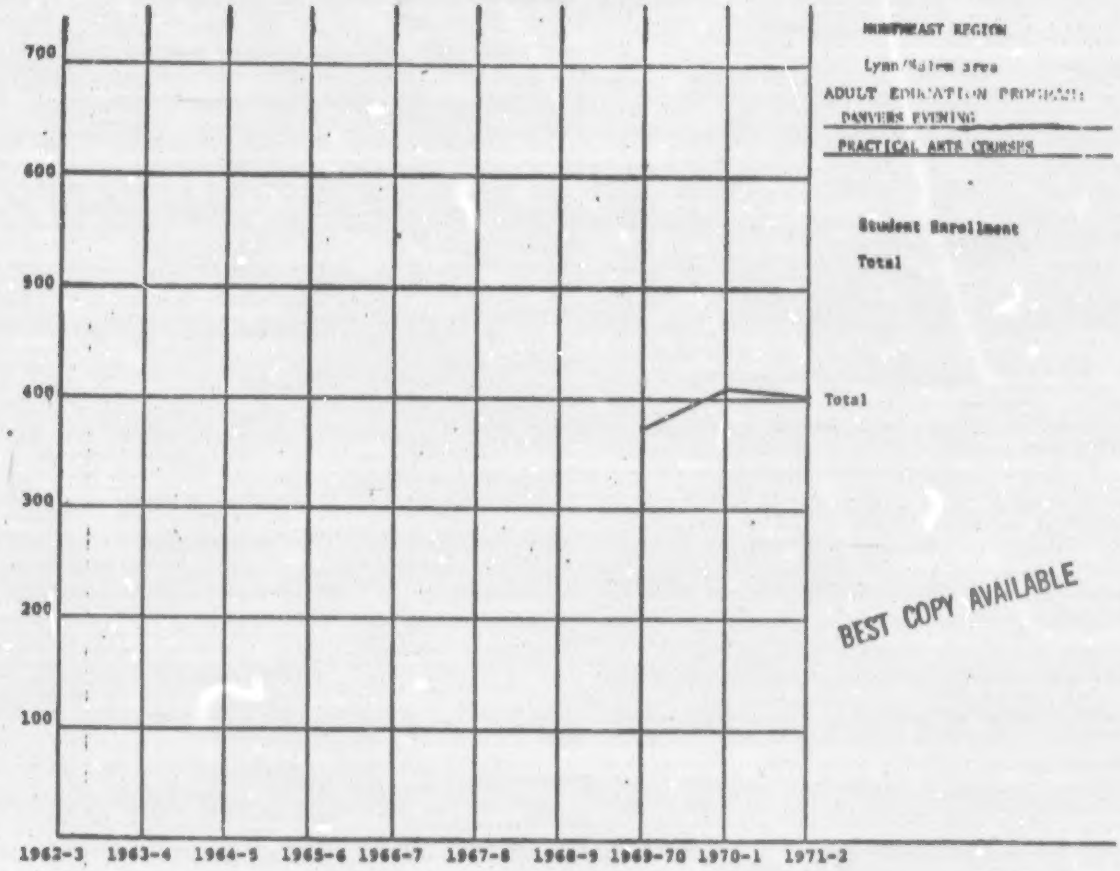
Framingham area

ADULT EDUCATION PROGRAM:

NATICK HIGH SCHOOL

Student Enrollment

Total



NORTHEAST REGION

Lynn/Salem area

ADULT EDUCATION PROGRAM:

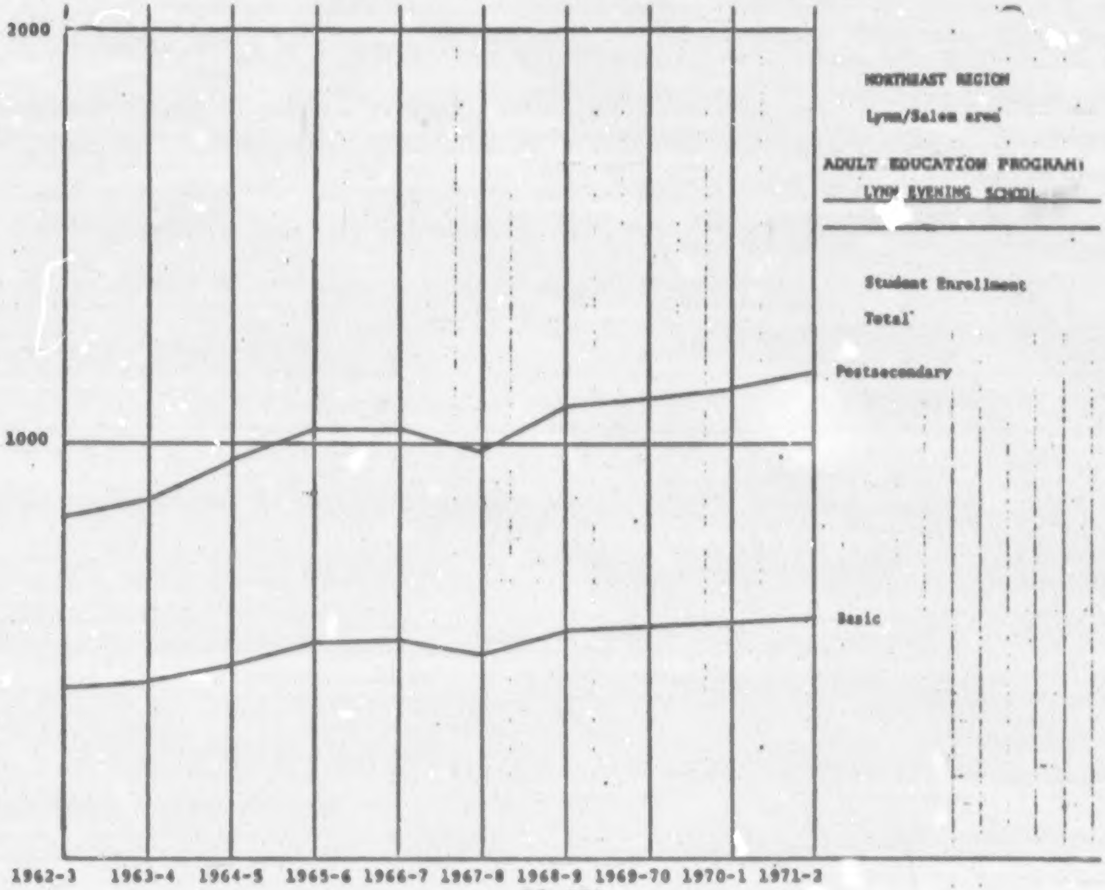
DANVERS EVENING

PRACTICAL ARTS COURSES

Student Enrollment

Total

BEST COPY AVAILABLE



NORTHEAST REGION

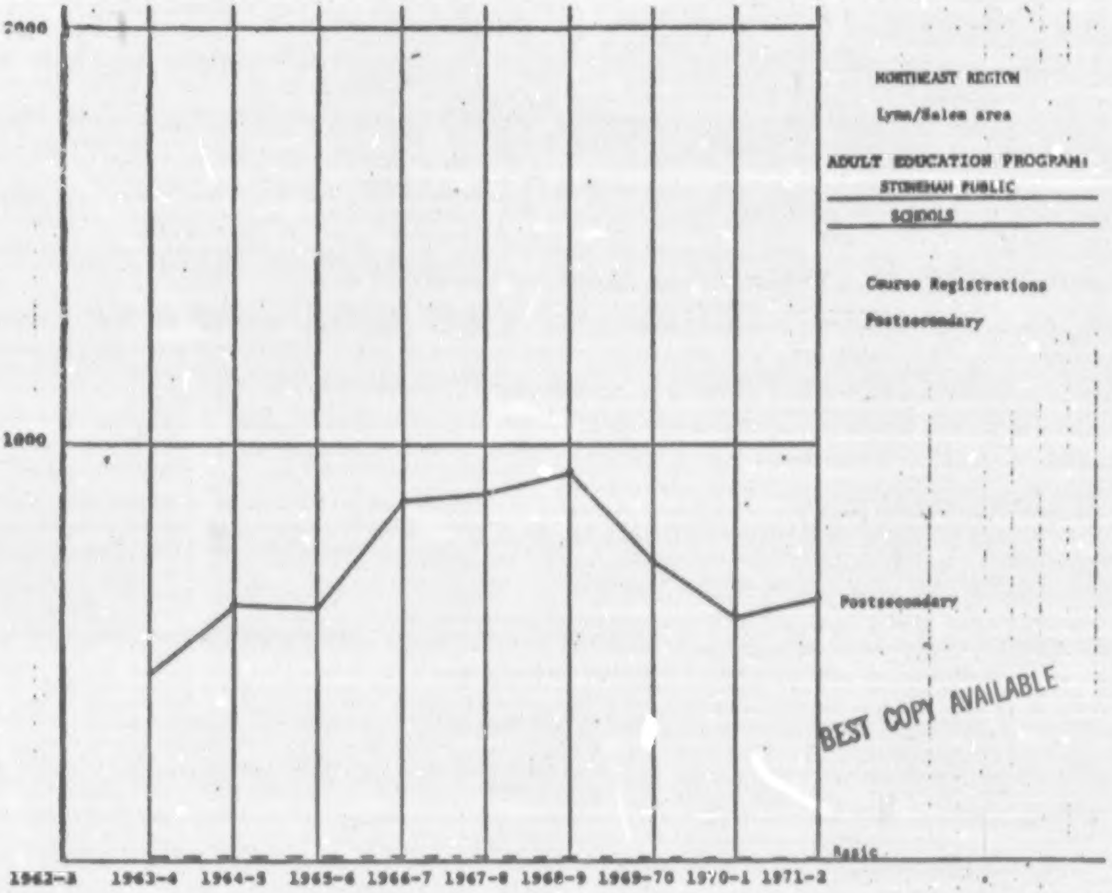
Lynn/Salem area

ADULT EDUCATION PROGRAM:

LYNN EVENING SCHOOL

Student Enrollment

Total



NORTHEAST REGION

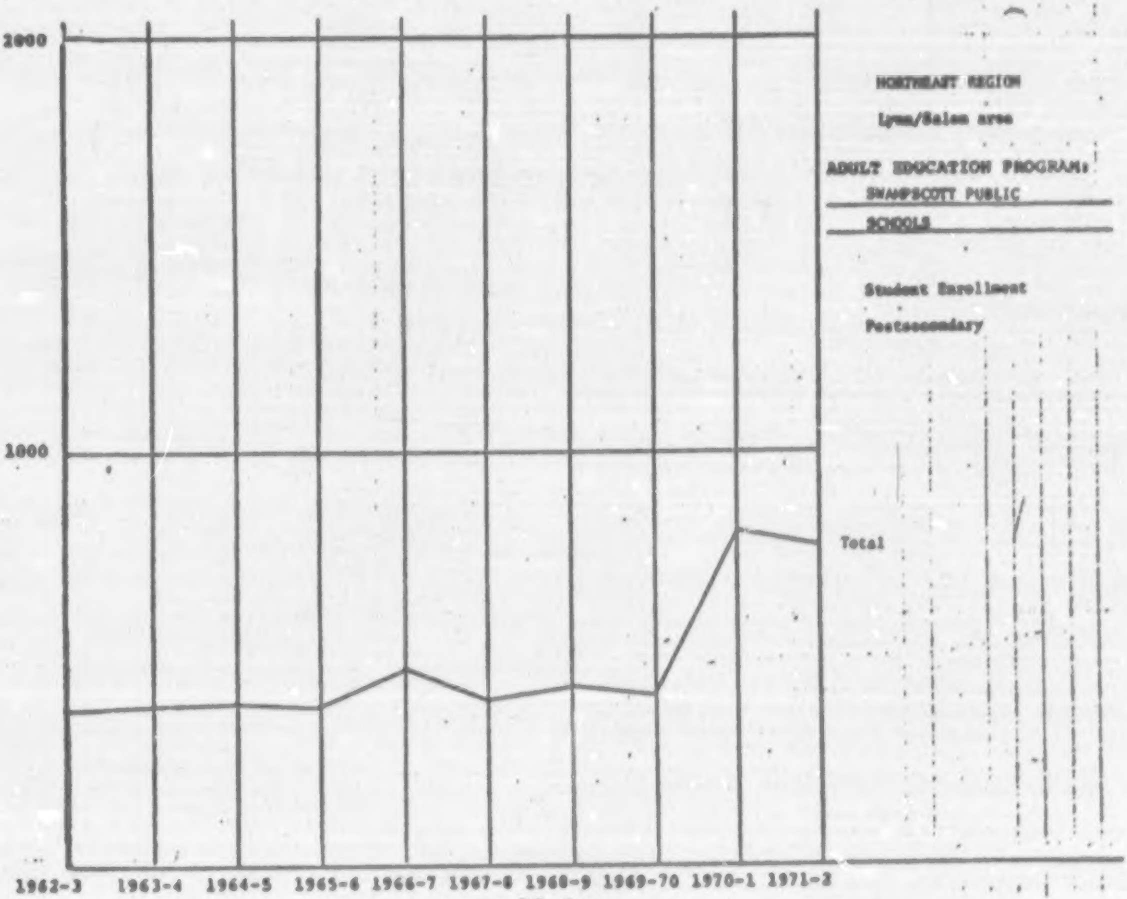
Lynn/Salem area

ADULT EDUCATION PROGRAM: STONEHAM PUBLIC SCHOOLS

Course Registrations

Postsecondary

BEST COPY AVAILABLE



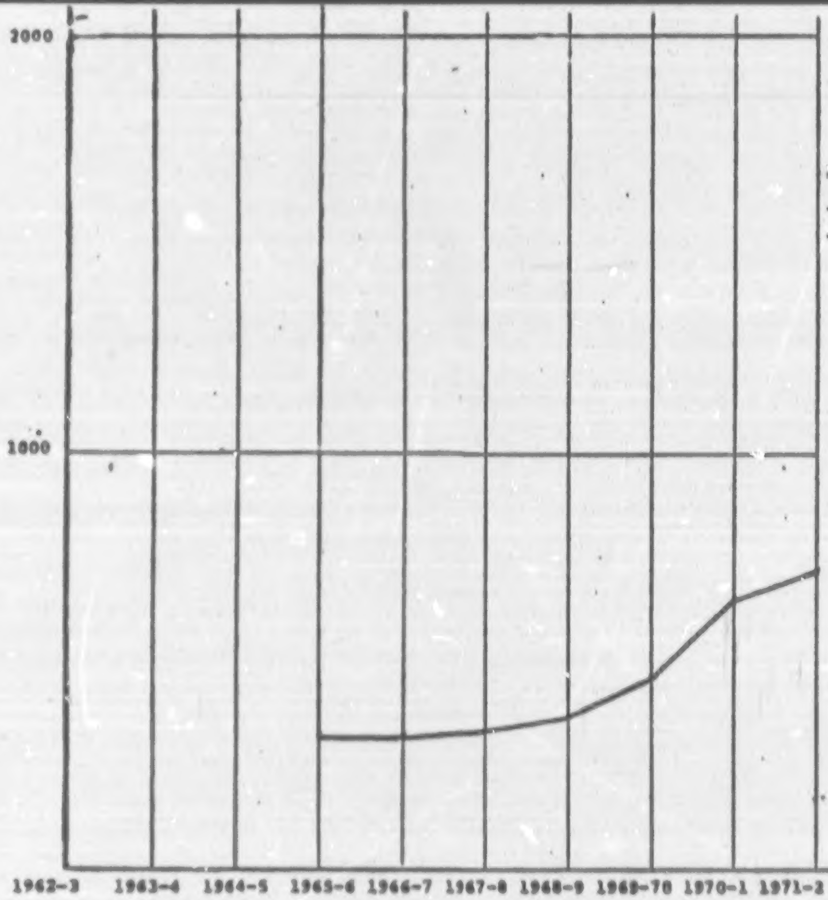
NORTHEAST REGION

Lynn/Salem area

ADULT EDUCATION PROGRAM: SWAMPSCOTT PUBLIC SCHOOLS

Student Enrollment

Postsecondary



NORTHEAST REGION

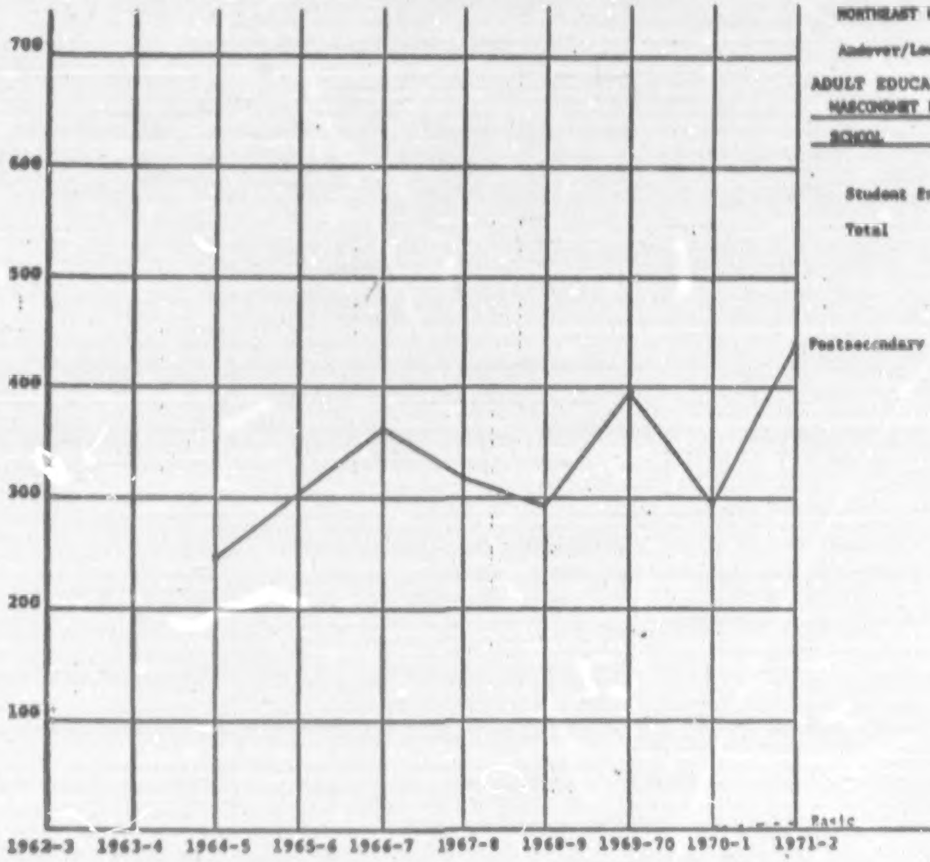
Andover/Lowell area

ADULT EDUCATION PROGRAM:
DRACUT ADULT EDUCATION
PRACTICAL ARTS PROGRAM

Student Enrollment

Basic/Total

BEST COPY AVAILABLE



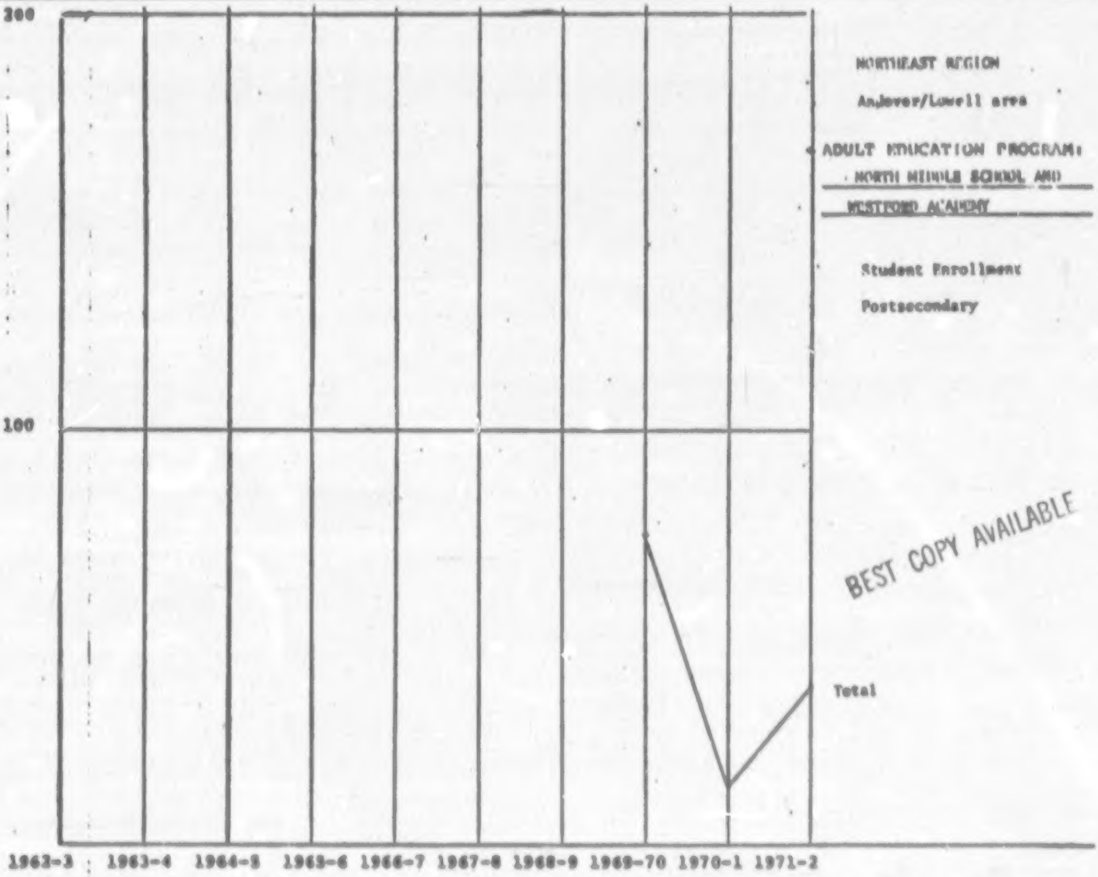
NORTHEAST REGION

Andover/Lowell area

ADULT EDUCATION PROGRAM:
MASCONOMET REGIONAL
SCHOOL

Student Enrollment

Total

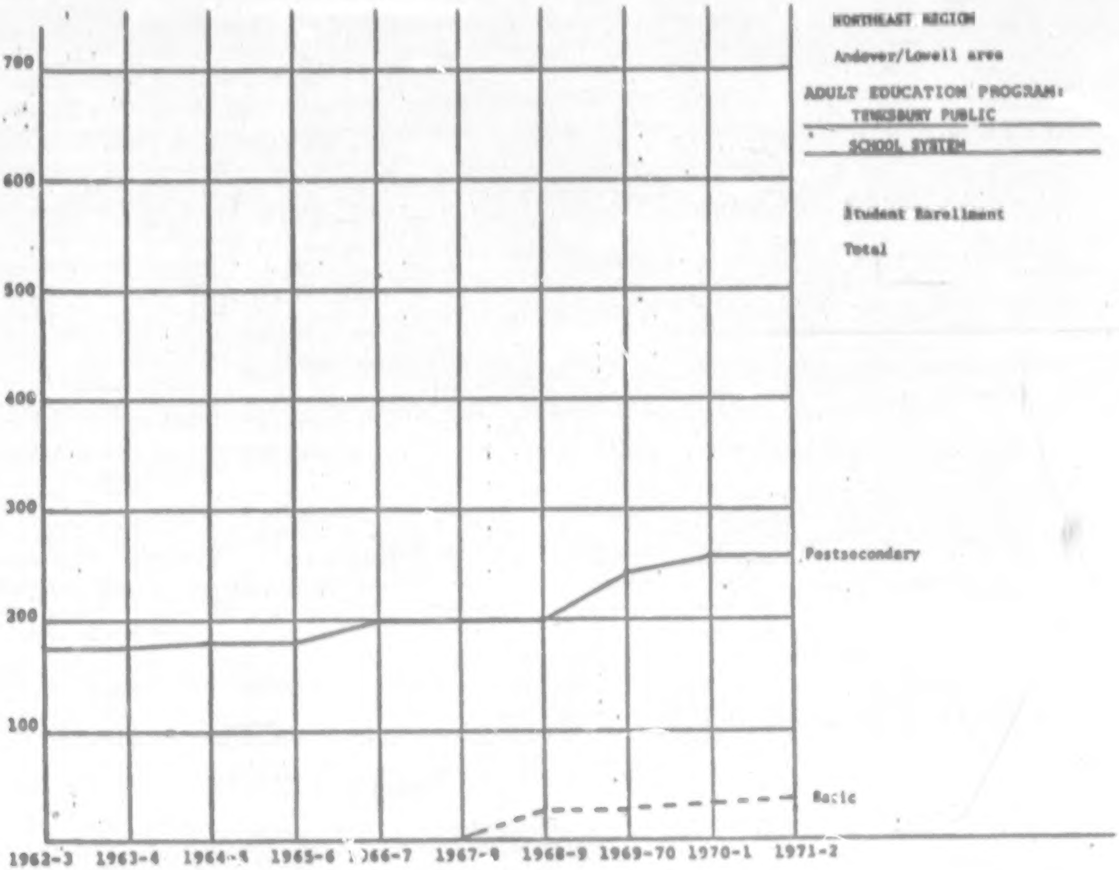


NORTHEAST REGION
Andover/Lowell area

ADULT EDUCATION PROGRAM:
NORTH MIDDLE SCHOOL AND
WESTFORD ACADEMY

Student Enrollment
Postsecondary

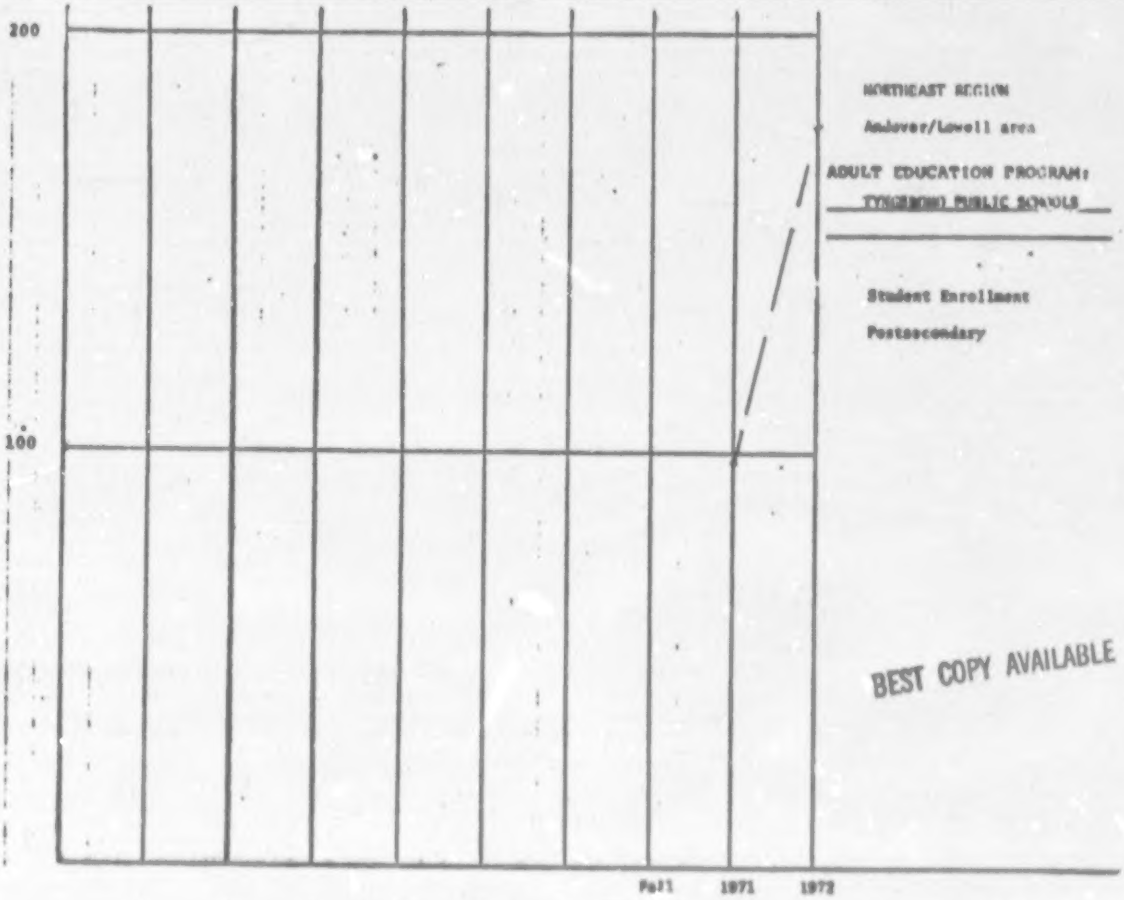
BEST COPY AVAILABLE



NORTHEAST REGION
Andover/Lowell area

ADULT EDUCATION PROGRAM:
TEWKSBURY PUBLIC
SCHOOL SYSTEM

Student Enrollment
Total



NORTHEAST REGION

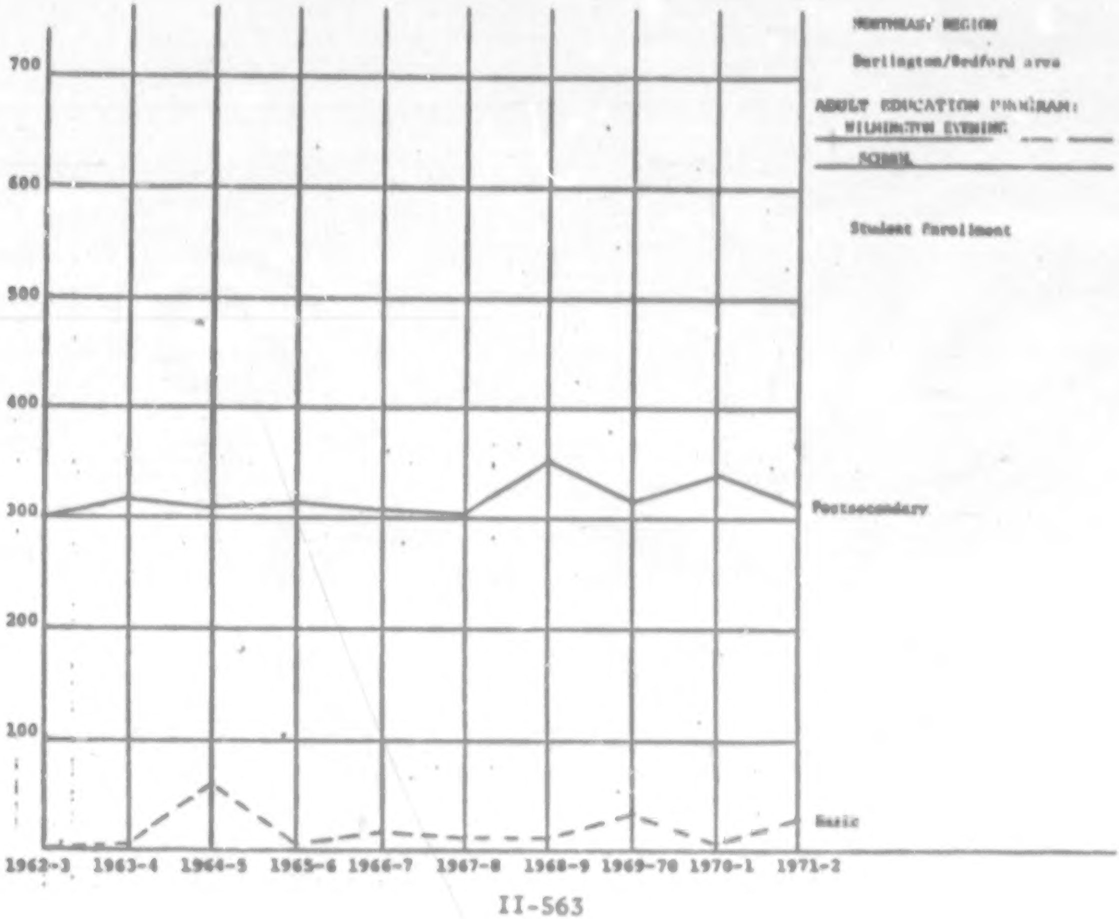
Andover/Lowell area

ADULT EDUCATION PROGRAM:
TYNGSBORO PUBLIC SCHOOLS

Student Enrollment

Postsecondary

BEST COPY AVAILABLE

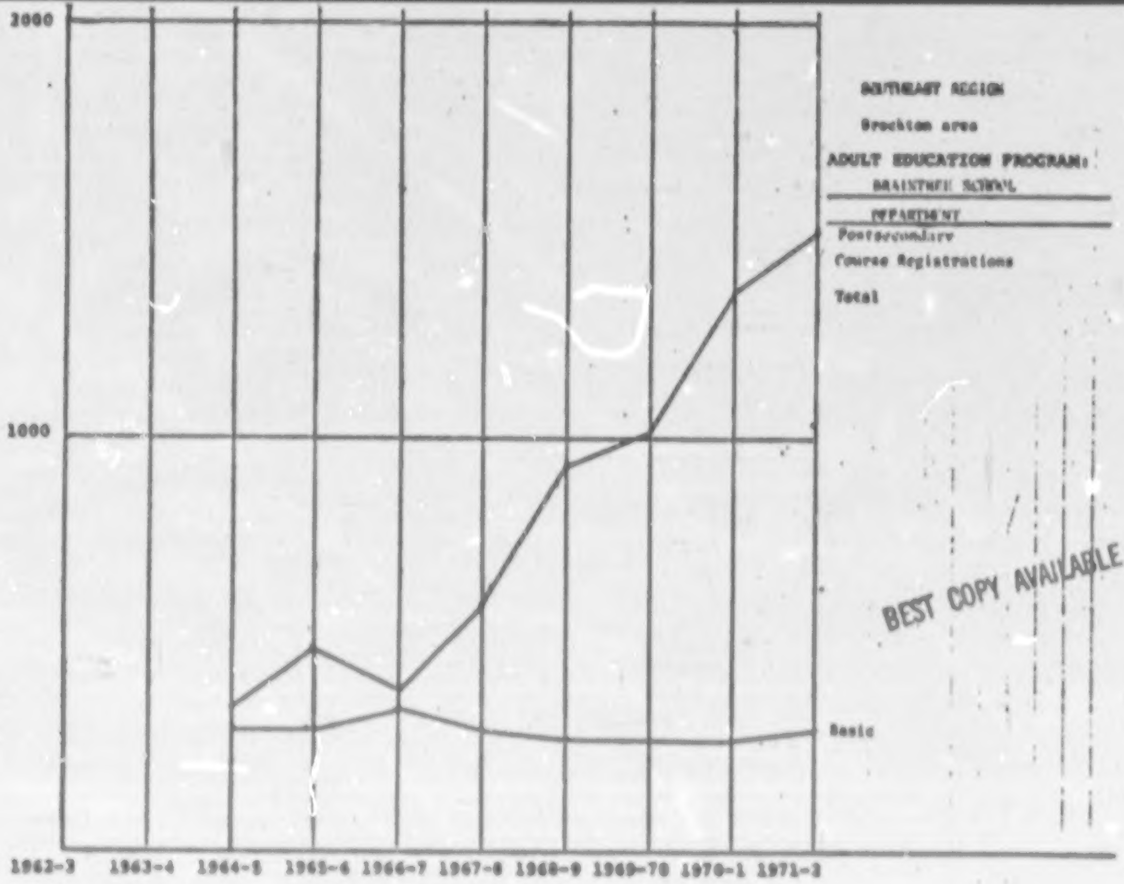


NORTHEAST REGION

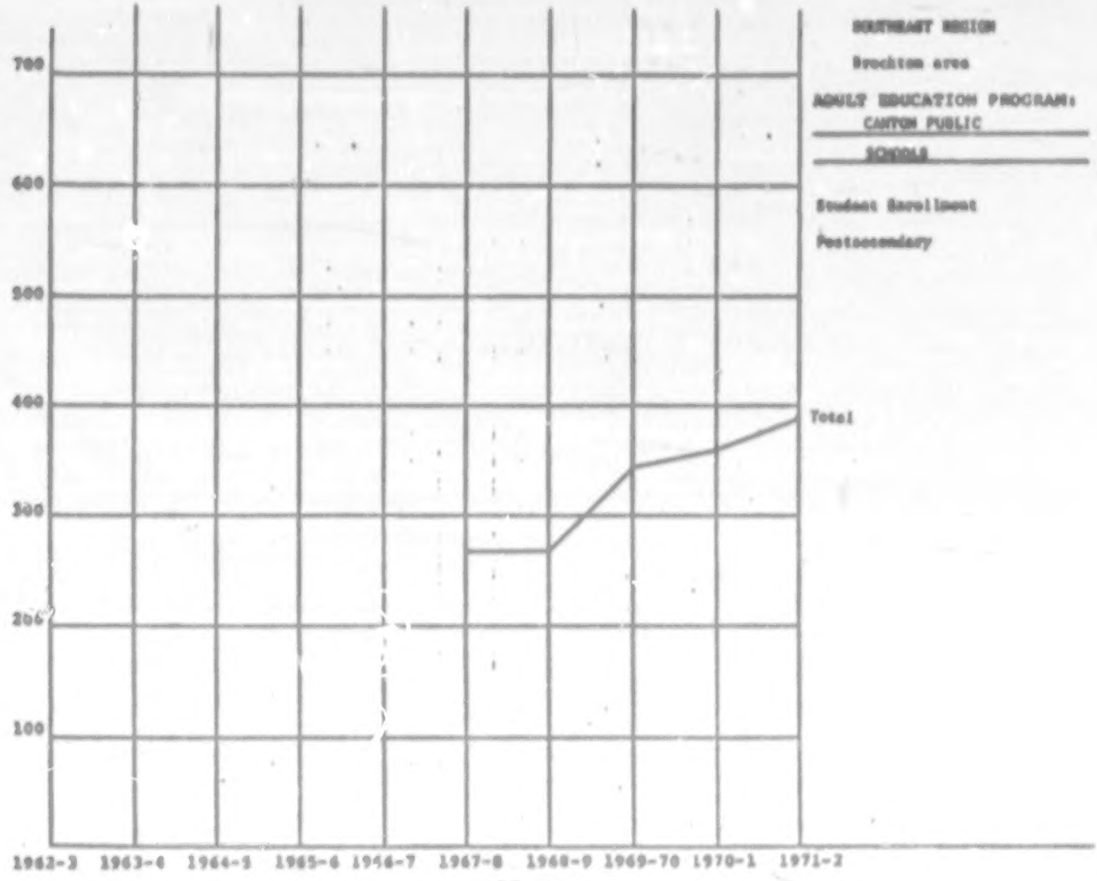
Burlington/Bedford area

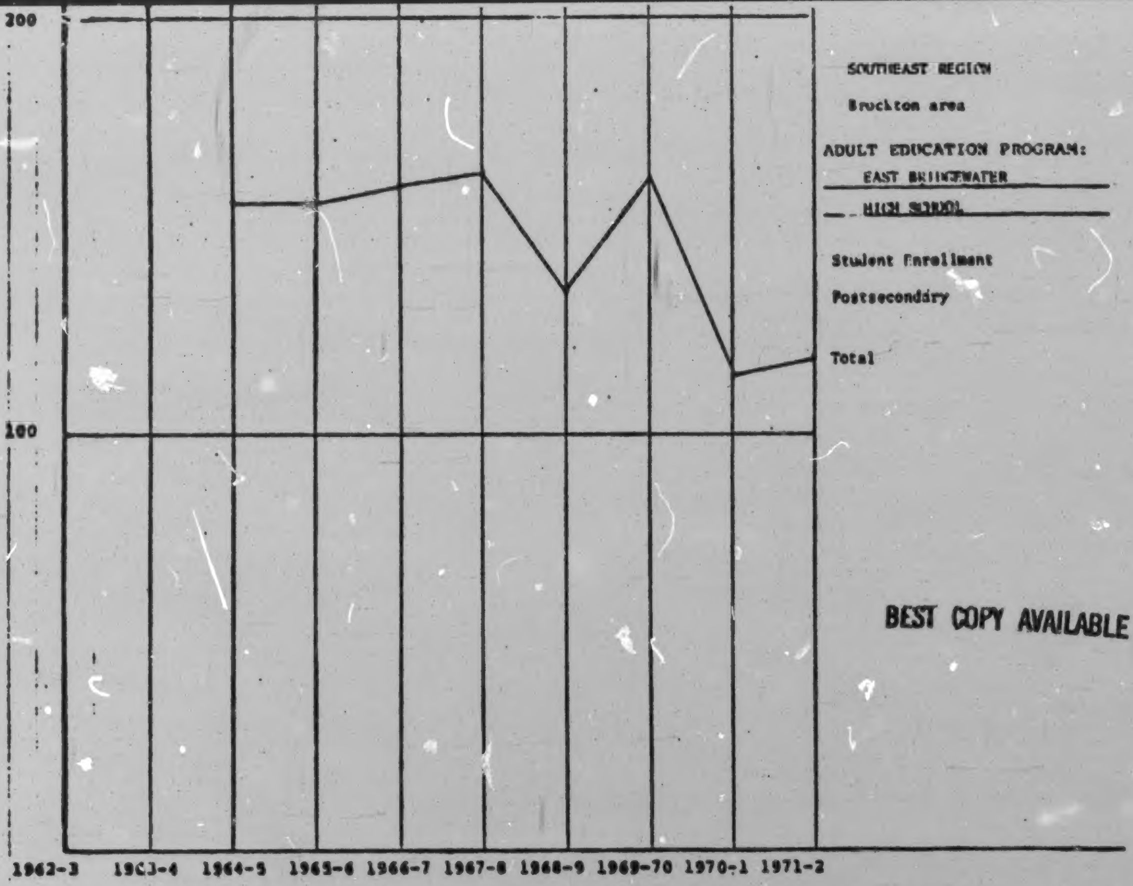
ADULT EDUCATION PROGRAM:
WILMINGTON EVENING
SCHOOL

Student Enrollment

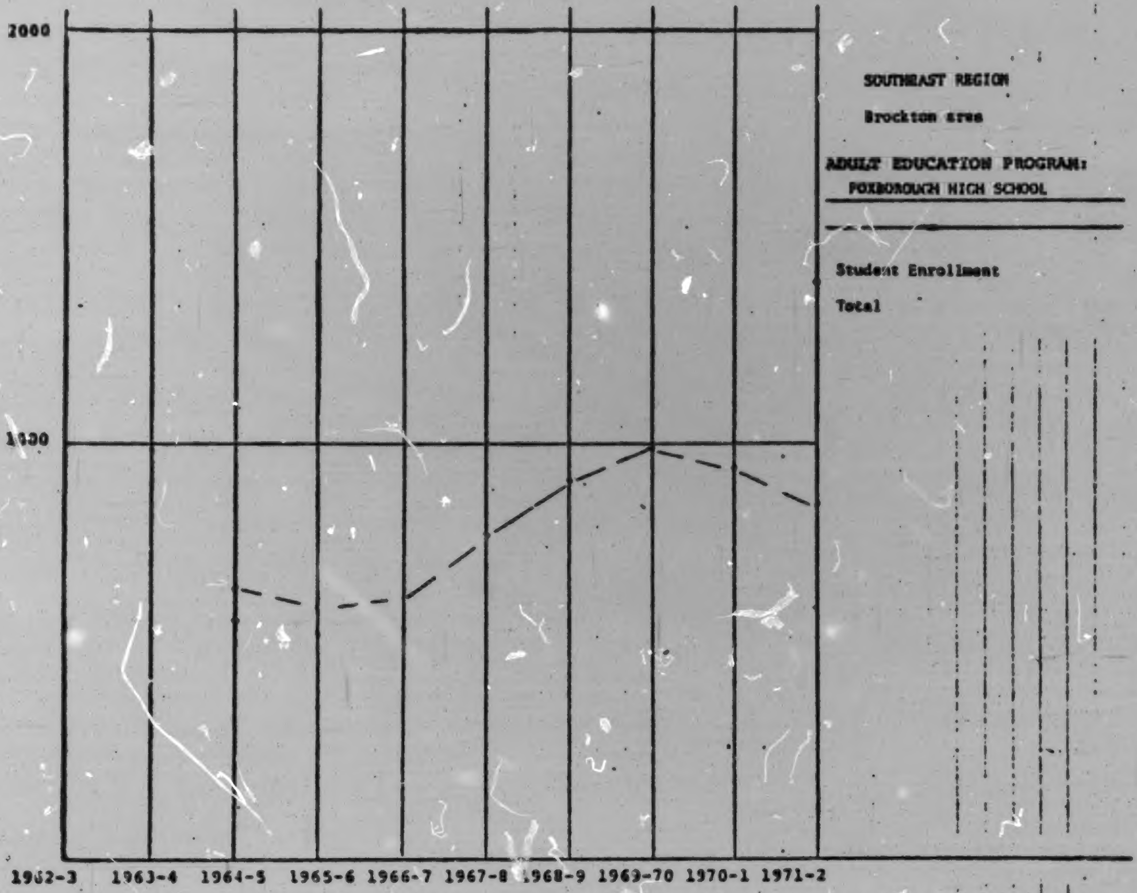


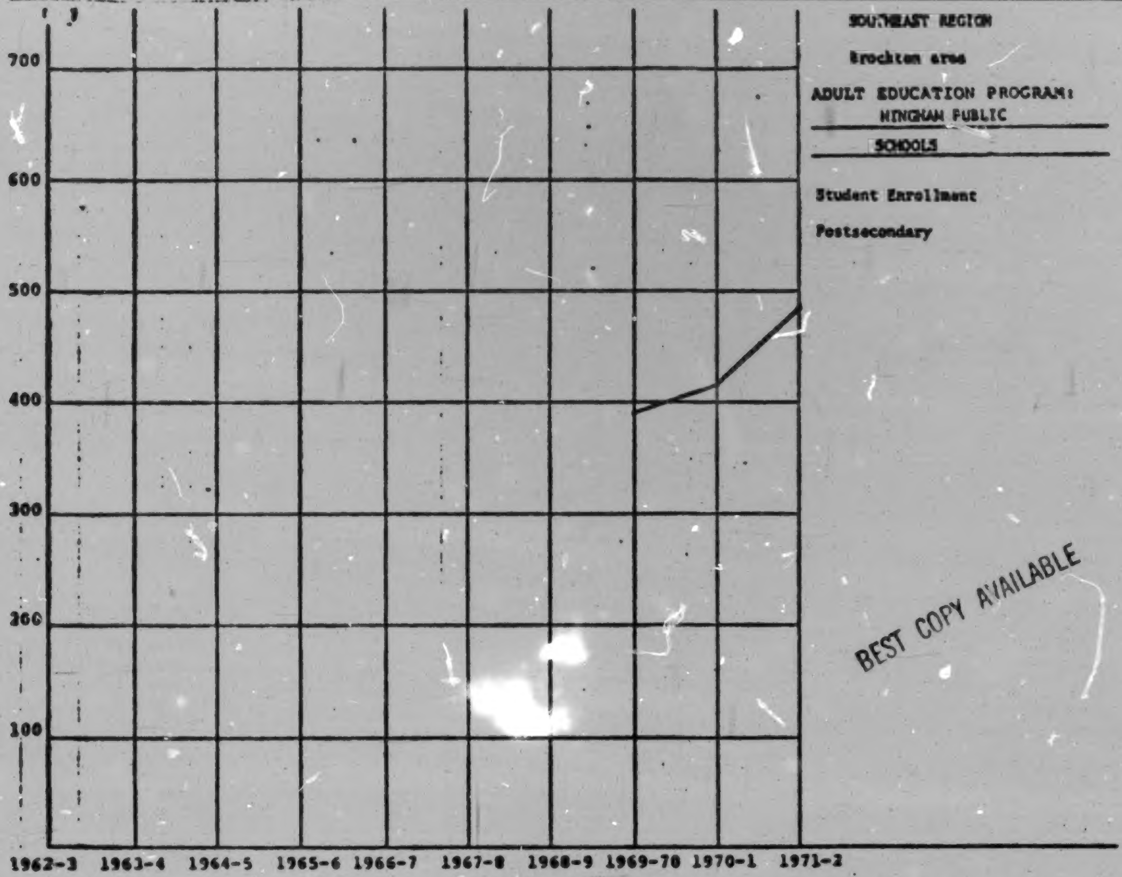
BEST COPY AVAILABLE





BEST COPY AVAILABLE





SOUTHEAST REGION

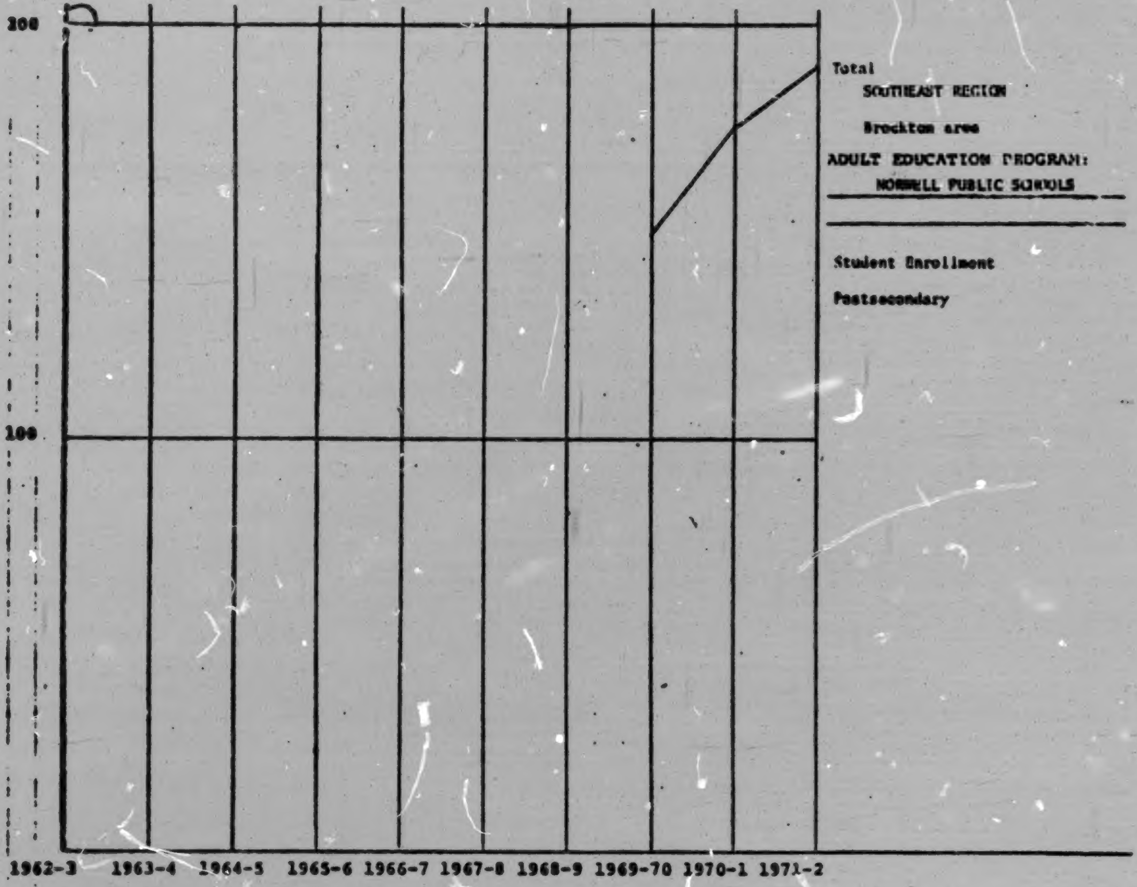
Brockton area

ADULT EDUCATION PROGRAM:
HINGHAM PUBLIC
SCHOOLS

Student Enrollment

Postsecondary

BEST COPY AVAILABLE



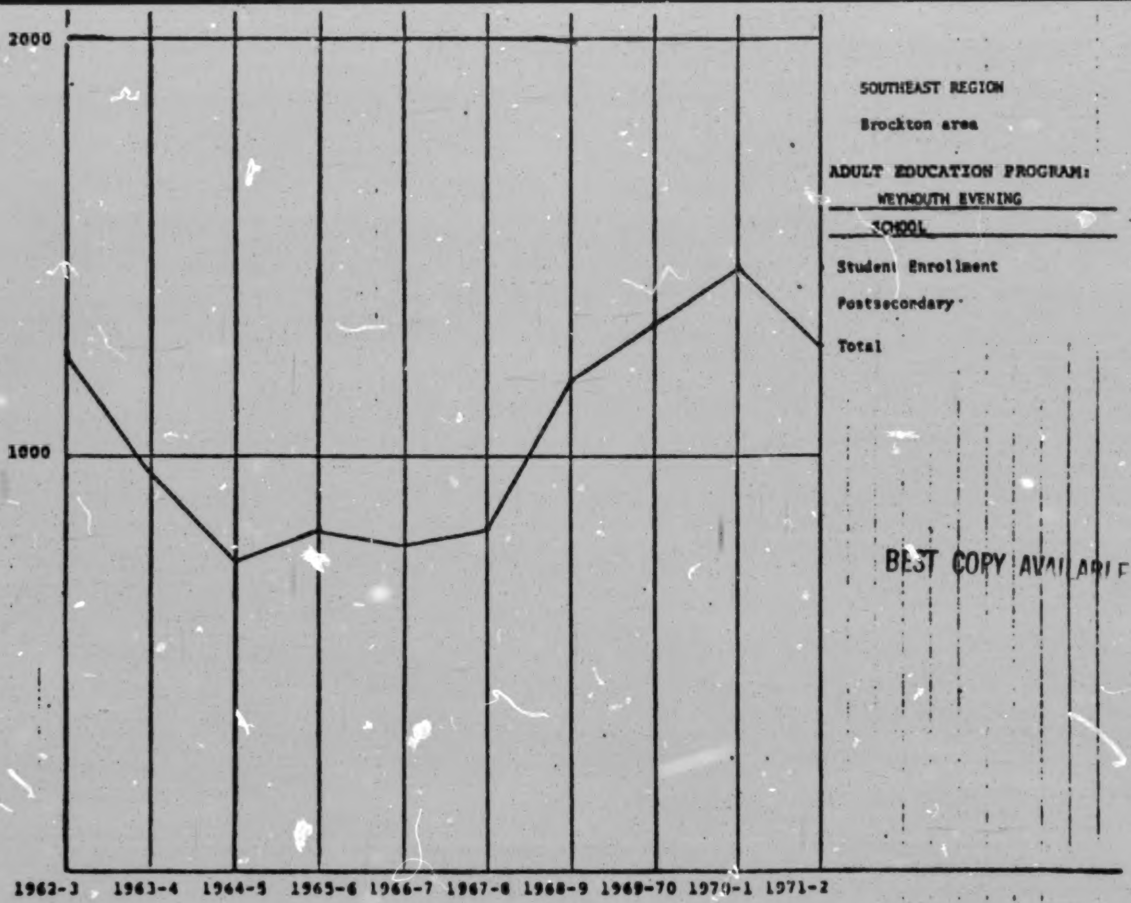
Total
SOUTHEAST REGION

Brockton area

ADULT EDUCATION PROGRAM:
NORWELL PUBLIC SCHOOLS

Student Enrollment

Postsecondary



SOUTHEAST REGION

Brockton area

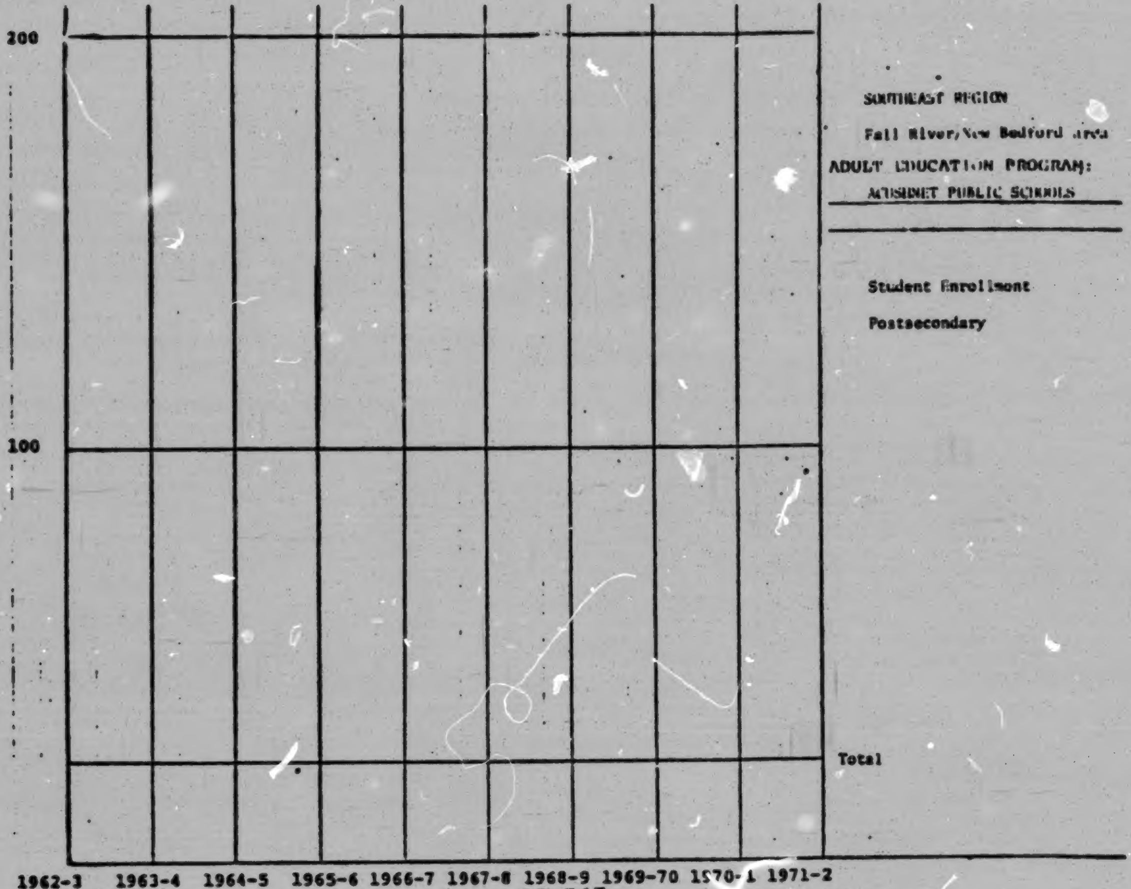
ADULT EDUCATION PROGRAM:

WEYMOUTH EVENING SCHOOL

Student Enrollment

Postsecondary

BEST COPY AVAILABLE



SOUTHEAST REGION

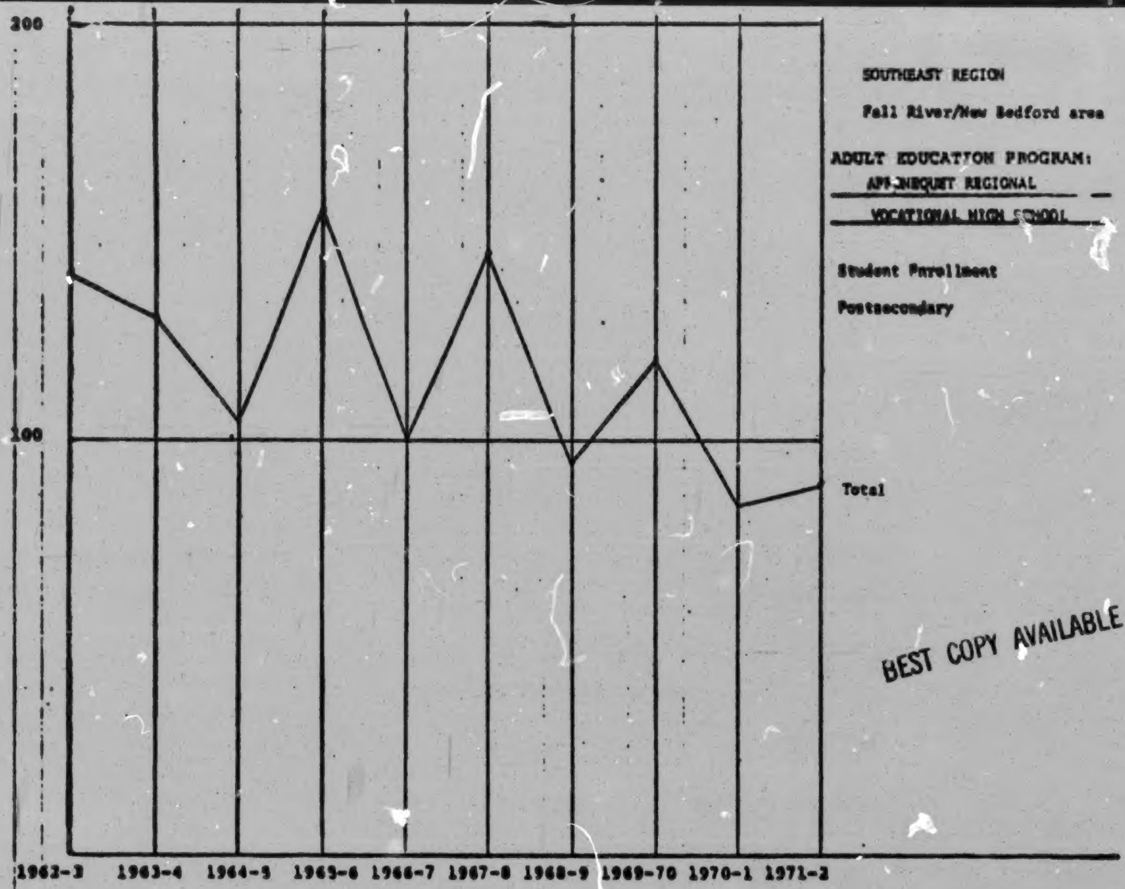
Fall River/New Bedford area

ADULT EDUCATION PROGRAM:

ACUSHNET PUBLIC SCHOOLS

Student Enrollment

Postsecondary



SOUTHEAST REGION

Fall River/New Bedford area

ADULT EDUCATION PROGRAM:

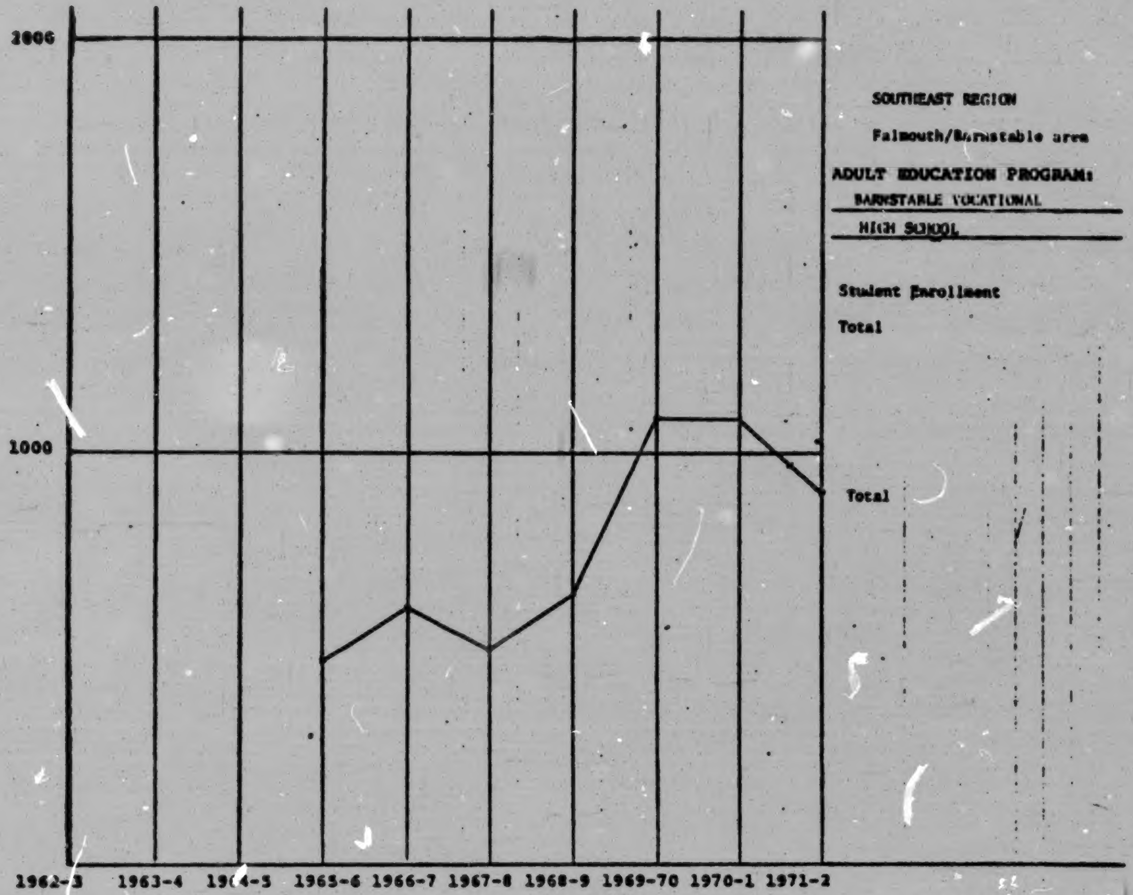
APPONEQUET REGIONAL

VOCATIONAL HIGH SCHOOL

Student Enrollment

Postsecondary

BEST COPY AVAILABLE



SOUTHEAST REGION

Falmouth/Barnstable area

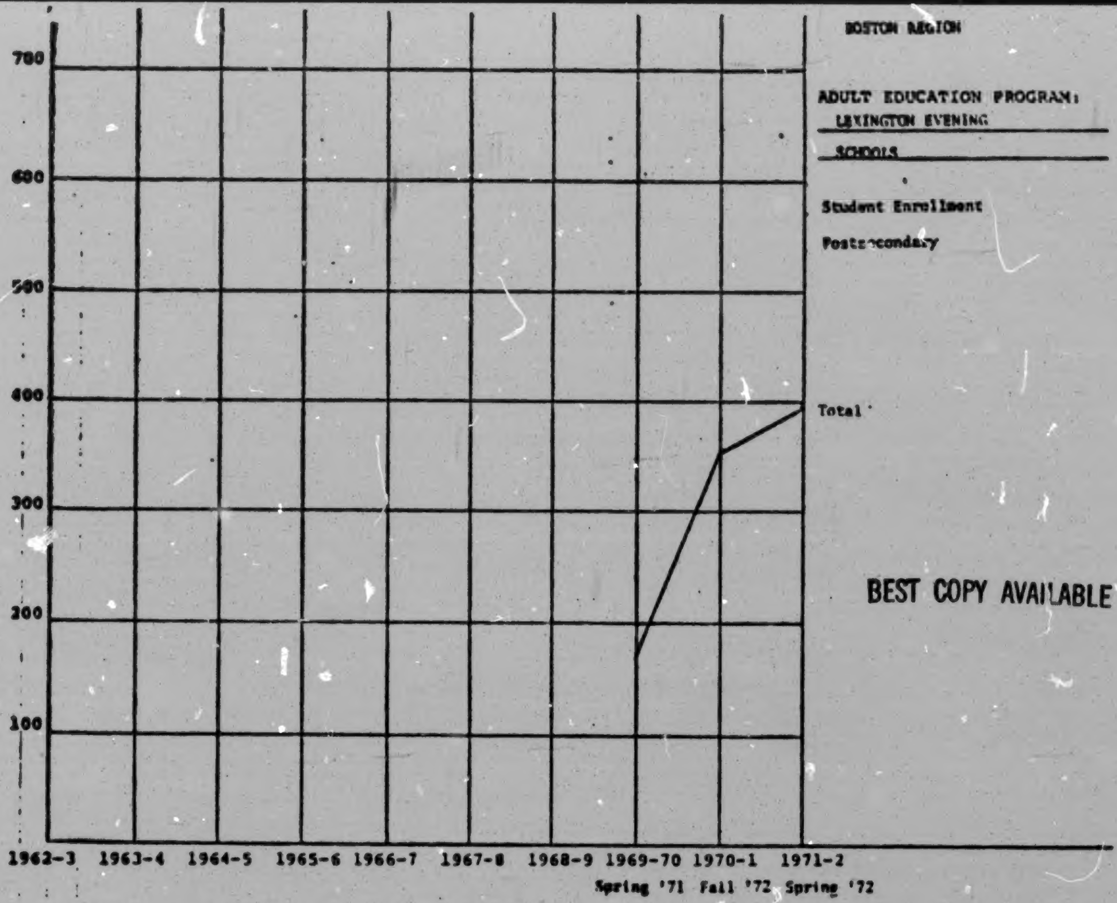
ADULT EDUCATION PROGRAM:

BARNSTABLE VOCATIONAL

HIGH SCHOOL

Student Enrollment

Total

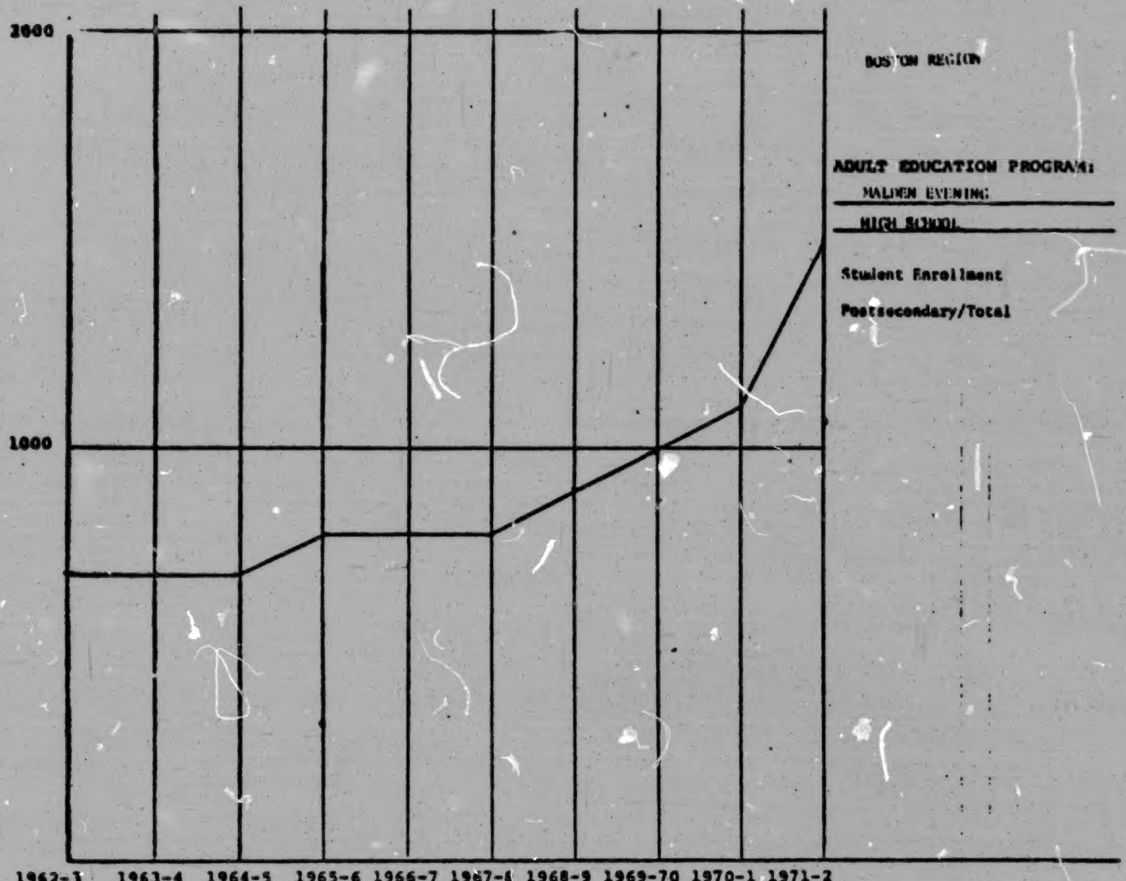


BOSTON REGION

ADULT EDUCATION PROGRAM:
LEXINGTON EVENING
SCHOOLS

Student Enrollment
Postsecondary

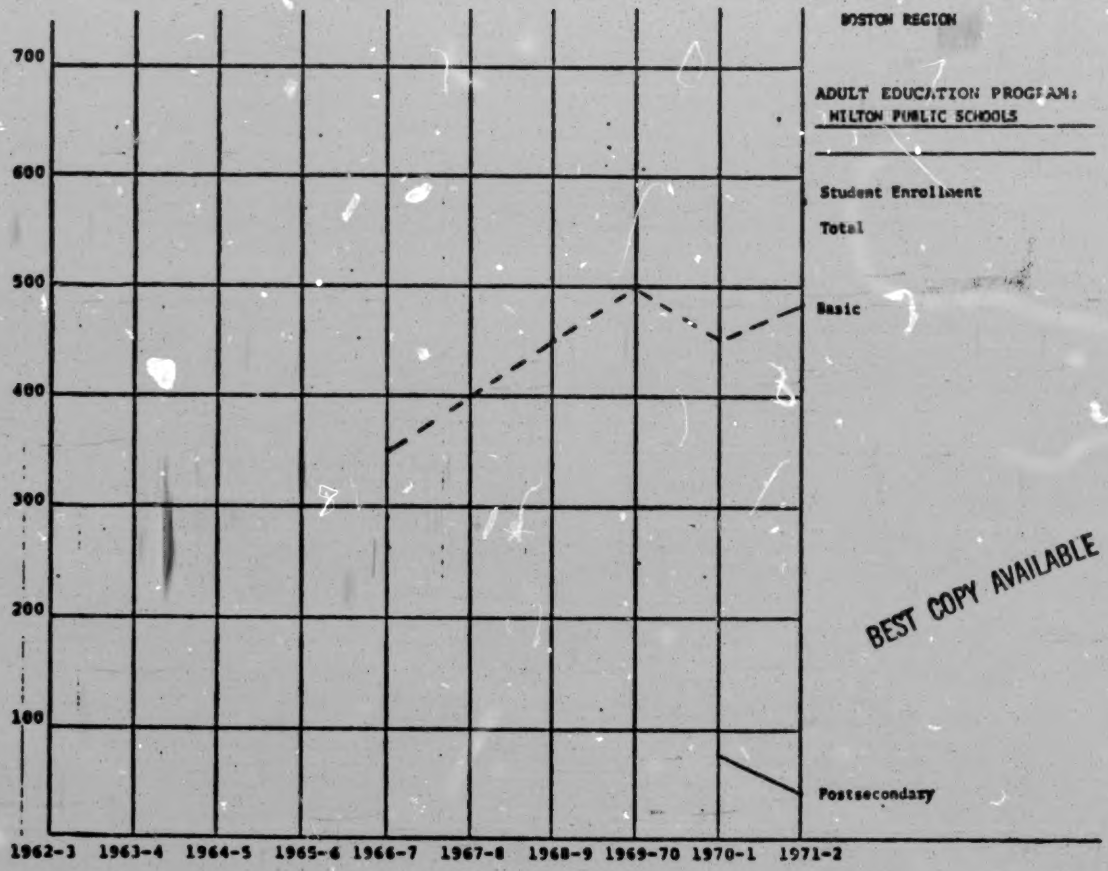
BEST COPY AVAILABLE



BOSTON REGION

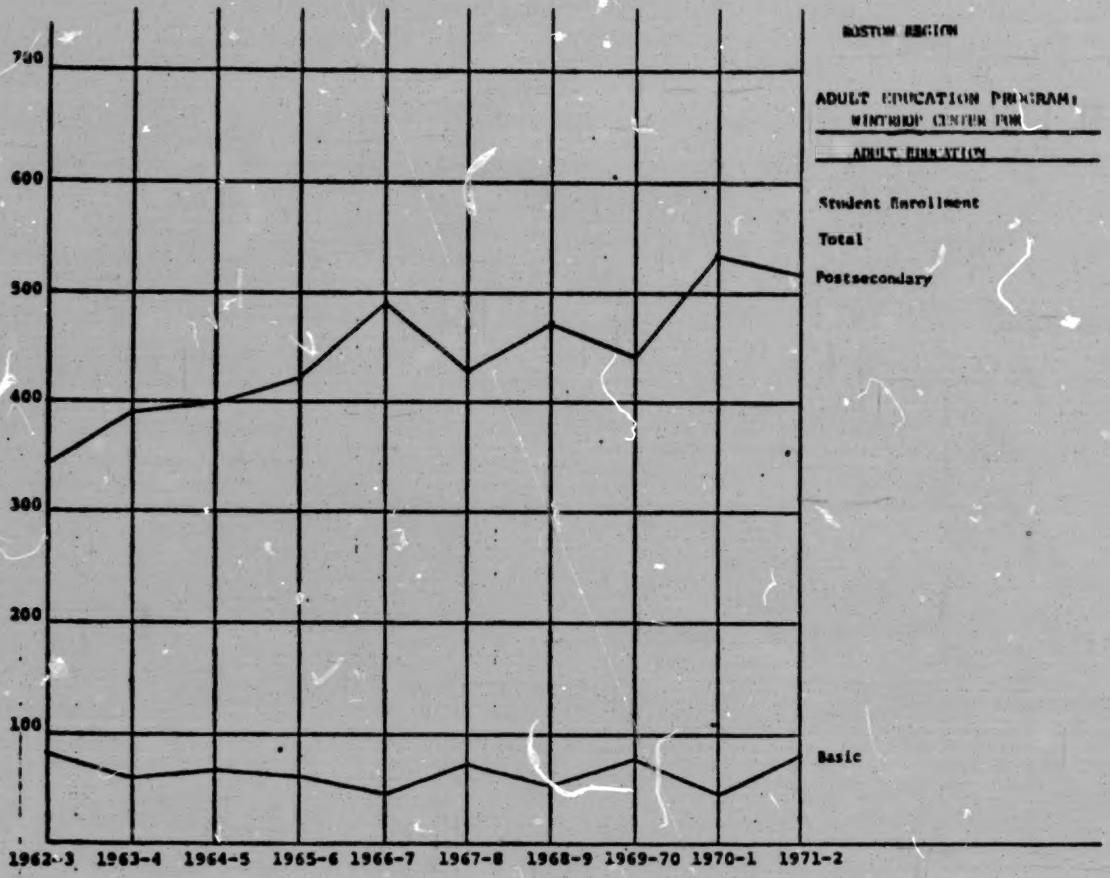
ADULT EDUCATION PROGRAM:
MALDEN EVENING
HIGH SCHOOL

Student Enrollment
Postsecondary/Total

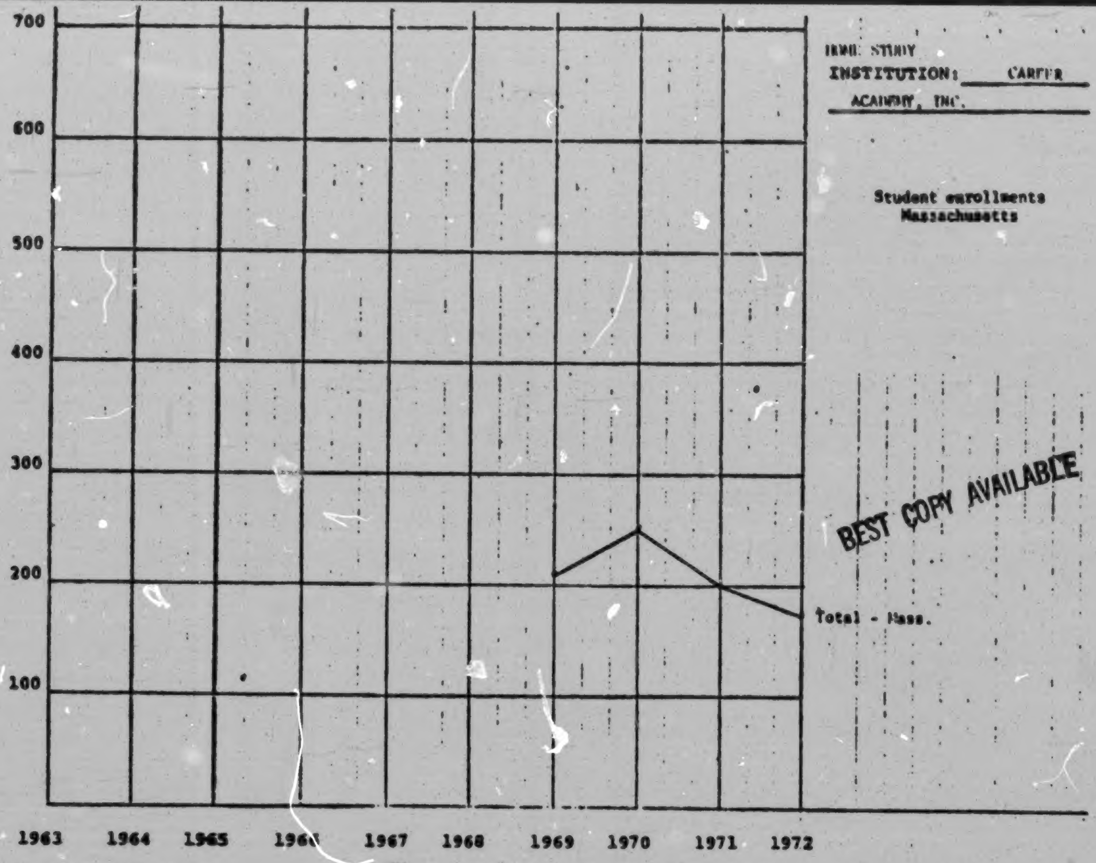

BOSTON REGION

ADULT EDUCATION PROGRAM:
MILTON PUBLIC SCHOOLS

BEST COPY AVAILABLE


BOSTON REGION

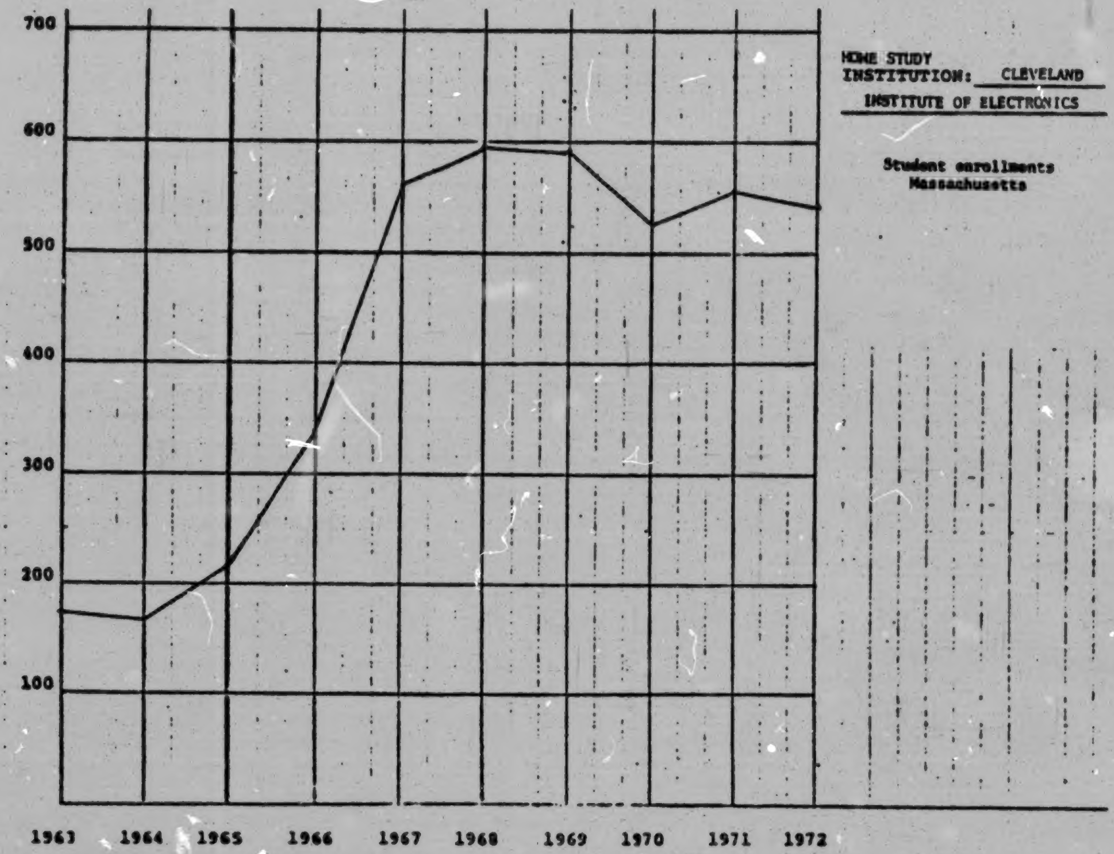
ADULT EDUCATION PROGRAM:
WINTHROP CENTER FOR
ADULT EDUCATION



HOME STUDY
INSTITUTION: CAREER ACADEMY, INC.

Student enrollments
Massachusetts

BEST COPY AVAILABLE

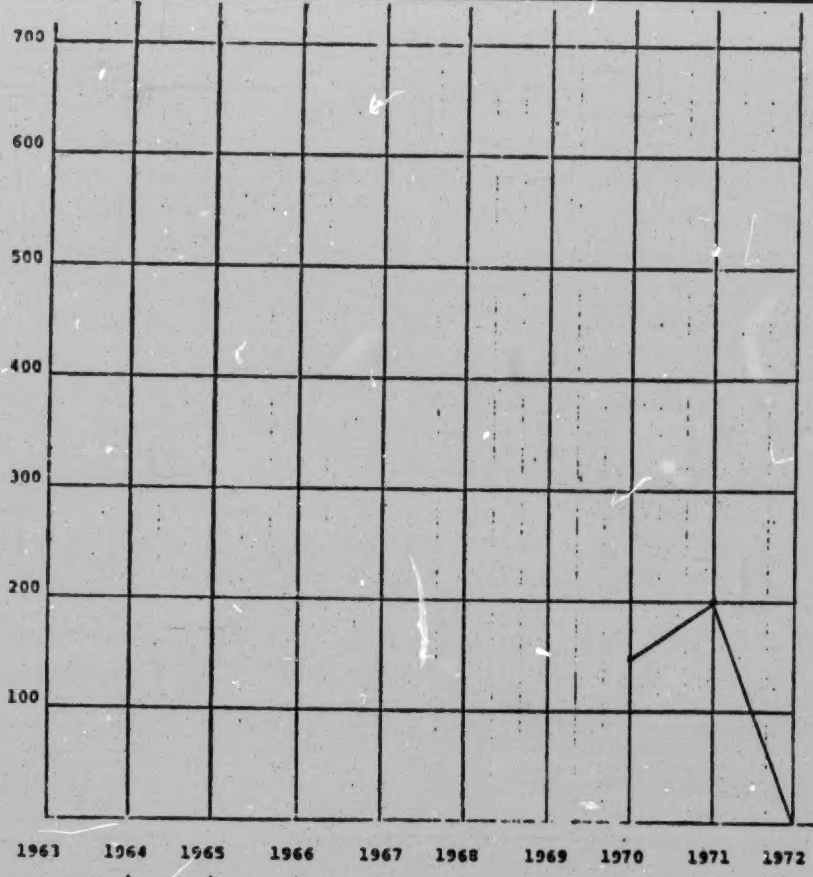


HOME STUDY
INSTITUTION: CLEVELAND INSTITUTE OF ELECTRONICS

Student enrollments
Massachusetts

HOME STUDY
INSTITUTION: COLUMBIA
SCHOOL OF BROADCASTING

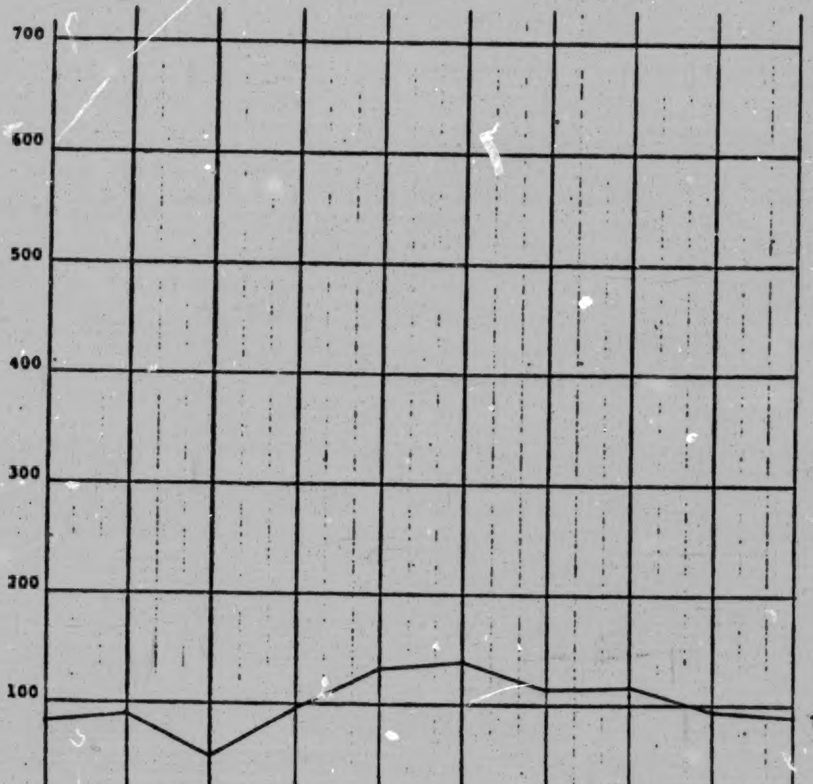
Student enrollments
Massachusetts



BEST COPY AVAILABLE

HOME STUDY
INSTITUTION: HOME
STUDY INSTITUTE

Student enrollments
Massachusetts



II.K.3. Inventory of Programs

Proprietary Institutions

Proprietary vocational schools fall into five categories: (1) business and office occupations, (2) skill trades and technical, (3) cosmetology, (4) medical and health, and (5) all others.

While some proprietaries operate evening classes only, the vast majority operate full-time day programs in conjunction with adult evening divisions. Because of the economic tie-in between the results of the school and evening courses, the educational trends and the economic impact on the day school operations must also be considered for a fuller understanding of what might happen to evening school programs.

The following questions are addressed for each type of school:

- how have proprietaries responded to changing interests of students
- what are completion rates of proprietary students
- what types of cooperation or coordination with other institutions exist
- what have been trends in enrollment

Category 1: Business and Office Occupations

Proprietary schools have a faster response rate to new and changing interests than the core degree-granting institutions:

1. Entry into the field of computer programming and data processing by business schools preceeded offerings from public institutions and private colleges by several years.

2. Specially designed outreach programs for veterans have been initiated by private schools in response to this market, while traditional higher education institutions have relied more upon their reputations as academic institutions to attract the veteran.

3. Programs in the field of retailing and fashion merchandising and interior decorating have been growing in proprietary schools, while public institutions are just now looking into the possibilities.

4. The use of alphabetic shorthand was introduced in private business schools in response to student needs.

5. Proprietary schools have the flexibility to modify programs through shortening the time required to master a subject. This has resulted in student interest in concentrated programs of study. Examples: Hickox Secretarial eight-week shorthand-typing; Andover School of Business six-week modules.

Proprietary schools have higher student completion rates in their programs than core institutions do for several reasons. (1) The programs are short, highly directional in scope, and career related. (2) The tuition charges are higher than in public institutions which results in a student body that has given more thought to enrolling and has a higher investment in getting something out of the program. The axiom that something is worth only what you pay for it holds true in education as well. (3) Schools surveyed showed more than 70% average completion. Since students are enrolled by individual courses rather than degree programs, both the institution and the student would classify as completed those people who finish the individual course in which they were enrolled.

There are a number of examples where proprietary business schools have gone out of business because of competition from lower-priced public programs and branch campuses opening in their geographic araa. The loss of part-time and continuing education programs is as much affected by competition for full-time day students as it is by competition for continuing education evening students. Typically, proprietary business schools have few part-time students (students enrolled for less than a full-time program in the day-time division). Some examples of schools that have gone out of business are:

Cape Cod Secretarial, Hyannis
Andover Institute of Business, Brockton
Campbell Business School, New Bedford
Ward Secretarial School, Worcester
Stevens Business College, Hubbardston
Lowell Commercial College, Lowell
Suburban Business School, Waltham
Bryant McIntosh, Lawrence
Salem Commercial School, Salem
Andover Institute of Business, Lynn
Burdett College, Lynn
Mary Brooks School, Boston
Wyndom Secretarial, Boston
Pierce Secretarial, Boston
Victor Comptometer School, Boston
Drake School of Business, Boston

The closings of these schools have been within the last five years, many of them within the last year or two. While competition from lower-priced public institutions was not the sole factor, it was a contributing factor to the closing of many of these institutions.

Particularly in the Northeast region have proprietary institutions been affected by the opening of public campuses. The process by which community colleges accept waiting-list students into evening programs in the fall and move them at midyear into full-time programs is competition for both evening and day programs at proprietaries.

In one case, Lowell Commercial College was turned down in late August by 10 students they expected to enroll in the full-time day secretarial program. These students would be attending instead a branch campus of the community college just opened in the evenings in Lowell. The loss of revenue was enough to put the school into a financial loss and at the end of the 1971-72 school year Lowell C. C. closed.

Proprietary business schools for the most part do not offer comparable programs to those at the community colleges. The business school program is less comprehensive and does not normally lead to a degree. But, since many evening school students enroll on a course by course basis, the duplication of such courses as shorthand, typing, accounting, and other business subjects has the effect of siphoning off enough enrollment to make them unprofitable. An example of this is in New Bedford, where public institutions are offering programs on a course by course basis which competes directly with the only remaining proprietary business school in the area: Plus, Kinyon & Campbell. The latter have now decided to discontinue all evening courses with the exception of typing.

In 1972 it became possible for any 2-year programs to apply to the Board of Higher Education for degree-granting status. Several business schools are now seriously considering becoming degree-granting. They wish to do so primarily to improve their competitive position with institutions now offering degrees. While the opportunity to award the degree to evening students could exist, there is no evidence that either the students attending private business schools or the schools themselves see this as a major goal. It is for the full-time day students that these institutions are interested in the associate degree. Such schools as Salter Secretarial, Katherine Gibbs, Bryant and Stratton, Andover School of Business and Chandler have indicated their intentions to file for degree-granting status.

Category 2: Trade and Technical Schools

Trade and technical schools have in some cases developed transfer relations with degree-granting institutions. Examples: ITT Tech Institute has students transfering to Northeastern U., Lincoln Institute and Wentworth College. Similar arrangements exist for schools like Mass Radio Electronics and Northeastern Industrial Tech. To date, there have been no arrangements for cross-registration of course offerings or joint responsibility for programs making up a curriculum major.

There are a number of examples of proprietaries responding quickly to changing student interests. N. E. School of Appliance introduced programs in microwave oven repair and maintenance, trash smashers and ice making machines within one month of determining that students wanted to know more about these appliances as part of the preparation for job placement. ITT Tech introduced a whole new curriculum in air, heating and refrigeration, taking one year from the time of conception to implementation. Much of the time lag was needed because of administrative procedures which involved getting approval from the State Dept. of Education. Mass Radio Electronics started a program in solid state electronics, taking only three months to put it into the curriculum once the decision had been made that there was sufficient student and employer interest.

In the trade and technical field, evening programs typically take twice as long to complete as full-time day programs. Completion rates vary from a low of 40% in a course which requires two years evenings to as high as 80% in courses which are 50 weeks long. Quite often the students' failure to complete the entire course is caused by his accepting employment in the field after reaching some acceptable level of competency.

Proprietary trade and technical schools have not found competition from the lower-priced public programs on the postsecondary level to be their main source of competition. Because of the present academic structure at community colleges there is little in the way of direct competition on a course by course comparison. However, one notable example which runs counter to the pattern is Springfield Technical Community College, with its strong course offerings in all the various trade and technical skills. The main source of competition is from the now expanding regional vocational technical schools which offer evening and adult programs at their facility. As these schools become more numerous, there will be a definite competitive squeeze on the existing proprietaries.

At this time, there are very few programs which show any cooperation between the proprietary and public sectors. One is an arrangement made by Cohasset High School to have one of its high school students take his academic subjects at the high school but courses in electronics, not available in Cohasset, at ITT Tech. This type of arrangement offers interesting possibilities for the future as an alternative to the creation of a massive voc/tech school system.

The trend in enrollments in some trade and technical schools is slightly up, with programs like auto technology enjoying substantial demand. Most of the trade and technical schools have programs of less than two years duration, and cannot qualify for degree-granting status. At this time none of them have shown any real interest in doing so. The way to compete is to offer something which the public sector has not offered and do a better job in training and placing the students than is now available in the public sector.

Category 3: Cosmetology Schools

Since cosmetology is an industry, which by its very nature is style-conscious and in a continual process of change, schools of cosmetology are quick to respond to changing interests of the student, the employer and the public. A typical situation would be in the introduction of new styling techniques. Within one month of their creation the cosmetology school would have made them a part of its curriculum. Another example of response to student interest has been the introduction of courses in styling, cleaning and repairing wigs.

The completion rate for part-time students is somewhere in the range of 66-85%. This is in part due to the individualization of instruction where the student can stop-out and then come back into the program. Contrary to other types of schools, cosmetology programs convert more students from part-time programs to full-time.

There is little competition with public institutions on the post-secondary level in the field of cosmetology. The main concern is the movement within the public secondary school sector to expand vocational offerings into the cosmetology field. A school that has gone out of business because of competition from Upper Cape Cod Vocational Technical School is Rogers School of Beauty Culture. Programs now in the planning stage at other Voc/Techs will have a similar effect on cosmetology schools in communities such as Haverhill, Framingham and Marlboro.

At the secondary school level, there are some spotty examples of cooperation. The Melrose Beauty Academy has a program with Melrose High School under P.L. 90-576. Fall River has agreed to use a local beauty school temporarily while the vocational school is being set up. Brockton is working out a program with LeBaron Beauty Academy to offer a program funded under Title III.

Category 4: Medical and Health

Most medical and health educational facilities are operated either by degree-granting institutions or hospital-affiliated schools of nursing. The few proprietary medical facilities are operating with limited curriculums. They have no arrangements for transfer of credits to degree-granting institutions located in Massachusetts. Except for the internship programs that they have for the students to obtain practical experience there is no working arrangement with any outside institution.

Since these schools are offering limited curriculums there is little new going on in response to student interest. The students come for the specific program being offered, and only changes in licensing requirements or employer needs would bring about any change in their present offerings.

Programs for medical lab assistants and medical and dental assistants run for 38 to 40 weeks, 2 to 3 evenings per week. The rate of completion is 85-95% and the directors of the schools attribute the high rate of completion to the shortness of the course and the occupational relevancy of the course content.

The proprietary schools choose areas of education within their field that do not come directly into competition with the public sector. They can not compete directly with community colleges having extensive financial resources and offering courses at a low price.

The trend in enrollment is flat, at a time when medical and health training has expanded greatly. Most of this expansion has been in the public sector. However, there has been an increase in the number of students in proprietaries who have either some college education or are women re-entering the employment market after taking time out for marriage and family.

None of the proprietary schools have plans to seek degree-granting privileges, nor do they plan to enter the more expensive and technically involved areas such as X-ray, and medical technician. The high cost of providing lab equipment for these programs and the competition from community colleges are primary inhibitors.

Category 5: Other institutions

The fifth category includes schools offering a wide range of programs such as truck driving, floral design, broadcasting, heavy equipment operation, aircraft maintenance, optical lens grinding, culinary, real estate, salesmanship, and many more. Because there are only a few of each dispersed throughout the state conclusions about them as a group cannot be made. However, they do share some common characteristics. Their programs are short, they offer one or two programs and their ability to serve their market is a function of economic factors, general public interest and the entrepreneurial ability to see a marketable service. These schools have no relationships with degree-granting institutions since their programs are designed to lead to a job upon completion of the course.

The number of programs available and schools enetring or leaving the field is in direct proportion to the students' rising or falling interest in what the institution has to offer. Since these institutions are not comparable to the community college or other public institutions they have not competed directly. However, the trend for community colleges and other degree-granting institutions to offer courses through a division of community service may present these schools with new competition. The student attending this type of proprietary school is doing so not to earn college credit but to acquire some specific skill or knowledge. The community service program at public institutions operates on the theory that any course can be offered as long as there is sufficient enrollment and the cost of operating the program is sustained from tuitions. This type of expansion by the public sector is a real threat to the individual school which must rely on one or two courses for its revenue. Branch campus offerings may be particularly threatening, since a school's main selling card may be convenience of location.

Public Regional Vocational-Technical Schools and Agricultural Institutes

Data on programs in the regional vocational-technical schools was obtained from the Division of Occupational Education, Massachusetts Department of Education. The information provided was that all postsecondary (or 13th and 14th grades) level programs in operation were full-time and during the day. Although evening courses are conducted, they are at the secondary level (11th and 12th grades).

However, the potential for part-time and continuing education programs at the postsecondary level exists in the regional vocational-technical schools. The greatest strength of these schools is their extensive, up-to-date facilities for technical training. No specific information is yet available on expansion of postsecondary courses into the part-time evening programs of the public regional vocational-technical schools.

These schools have already developed some cooperative arrangements with community colleges (see Section II.E on cooperative efforts) and more such arrangements are likely in both full and part-time postsecondary programs.

Adult Education Programs

The heaviest concentrations of courses are in the traditional areas of arts and crafts and family and personal interests (including home economics). These courses in painting, cooking, sewing, and other crafts have been offered for many years. Classes in Evening Practical Arts are subsidized by the state.

A few courses are also typically offered in typing and other business skills, and in general academic areas, particularly foreign languages. Courses at the secondary level are not included in this survey. Courses in auto mechanics, carpentry, and other trade subjects are also offered by a majority of schools.

High level professional courses in engineering or business are not typically offered, nor courses in social or community service subjects, child care, or education.

Courses in cultural and current interest areas are concentrated in some programs such as Worcester and the two adult centers in Boston and Cambridge.

Typically, there is no limit on what adult education programs can offer in the way of new subjects. The effective limit on the program is student interest: no course will be given unless it attracts a minimum number, usually fifteen, of students. Thus courses may be offered which are never actually given.

Adult education programs have a variety of means of assessing local interest in subjects. Advisory boards from the community, surveys of current students and suggestions from individual students, and, to a lesser extent, surveys of local citizens are all utilized. Many programs will consciously test local interest by advertising new courses to see if enough people will enroll.

This system has a great deal of flexibility for diversity and change, which in most cases is not capitalized upon. One problem is in publicity. In Worcester an extensive campaign to bring new students into the program successfully captured community interest and enrollments rose in new areas. Another problem is the fifteen-student limit. Although there may be seven people in one town and eight people in an adjacent town interested in a course, neither program will offer it. The Concord-Carlisle, Lincoln-Sudbury, Acton-Boxborough joint publication of courses is an attempt to overcome this difficulty. Citizens of any one town can attend a school in another town without paying a higher fee.

The main barrier to changing programs is probably the misconception of many citizens of the adult education program as only offering evening practical arts. If programs expand, public awareness and interest would also change.

Home Study Schools

Home study schools offer courses in many of the same program areas of proprietary schools: business and office skills, trade and technical, medical and health and other skills. Correspondence schools appear to be more diversified than proprietary schools. LeSalle Extension School, for example, offers courses in all five categories. Some also offer general academic courses.

BEST COPY AVAILABLE

INVENTORY OF PROGRAMS IN PROPRIETARY AND INDEPENDENT INSTITUTIONS

WESTERN REGION

KEY

D - diploma
C - certificate
R - registration
NR - not reported
L - license

Deg - degree (not specified)
AS,AAS - associate degree
NC - noncredit
ND - nondegree
M - masters degree
BA - bachelor's degree

	BUSINESS & OFFICE	SKILL TRADES & TECHNICAL	COSMETOLOGY	MEDICAL & HEALTH	ALL OTHERS
Springfield					
Brom Barber School			D		
United Technical School					
Vocational Education & Training Corp.		D			
Springfield Hosp. Medical Center				NC	
St. Hyacinth College & Seminary					C or NC
City Aviation					NR
Kay-Harney Hair Design Academy			NR		
Barnes Aviation					NR
Pittsfield/No. Adams					
Berkshire Christian College				AS	BA
Berkshire Aviation					NR
Amherst/Northampton					
Northampton J.C.	NR				
City Aviation					NR

CENTRAL REGION

	BUSINESS & OFFICE	SKILL TRADES & TECHNICAL	COSMETOLOGY	MEDICAL & HEALTH	ALL OTHERS
Worcester					
Leo's Beauty Institute			D		
Brom's Academy of Hairdressing			NR		
Becher J.C.	AS				
Vitek Inc. (Air Worcester)					C
Electronic Computer Prog.	C				
Hiller Airport Flying Service					NR
N.E. School of Accounting	C				
Salter Secretarial School	D-day;C-PT				
Hopedale Airways					C
Sterling Aviation					NR
Fitchburg/Gardner					
Hunter Aviation Corp.					C
Regina Coeli College					
Henri's School of Hair Design			NR		
Framingham					
Optician's School of Framingham					C
Don's Flying Service					NR
Kenneth Hair Design			D		

BEST COPY AVAILABLE

INVENTORY OF PROGRAMS IN PROPRIETARY AND INDEPENDENT INSTITUTIONS

NORTHEAST REGION

	BUSINESS & OFFICE	SKILL TRADES & TECHNICAL	COSMETOLOGY	MEDICAL & HEALTH	ALL OTHERS
Lynn/Salem					
Gordon-Cornwell Theo. Seminary					M-NC
Marian Ct. Secretarial School	D				
Continental Beauty Academy			D		
East Coast Tractor Trailor School		C			
Marshfield Beauty Acad.			NR		
N.E. Flyers Air Service					NR
No. Atlantic Airways					C
TAD Institute					
Andover/Lowell					
Lowell Academy			D		
M. Fazio Institute of Beauty Culture			C		
Solari School of Hair Design			C		
Andover Institute of Business	NR				
B.B. Airways Inc.					NR
Dutton Flying Service					C
Tawnac Aviation					C
Burlington/Bedford					
Honeywell Inst. of Info. Science	D				
Control Data Institute	D				
Executive Flyers Aviation					FAA-C
Hathaway School of Conservation Ed.					NR
Technical Aero Service					NR
Comerford Flight School					NR

SOUTHEAST REGION

	BUSINESS & OFFICE	SKILL TRADES & TECHNICAL	COSMETOLOGY	MEDICAL & HEALTH	ALL OTHERS
Brockton					
Brockton Academy of Beauty Culture			D		
Old Colony Trade School					
Chandler School of Welding		NR			
King Aviation Service					NR
Hall Institute of Real Estate	C				
Marshfield Aviation					L
Fall River/New Bedford					
Fall River Beauty Academy			D		
New Bedford Beauty Academy			D		
Taunton Beauty Academy			D		
Swain School of Design					BFA-NC
Diman Reg. Tech. Institute					
Fall River Academy of Beauty Culture			NR		
Falmouth/Barnstable					
Well's Flying Service					C-L
Hyannis Aviation					L

BEST COPY AVAILABLE

INVENTORY OF PROGRAMS IN PROPRIETARY AND INDEPENDENT INSTITUTIONS

BOSTON REGION

Boston

	BUSINESS & OFFICE	SKILL TRADES & TECHNICAL	COSMETOLOGY	MEDICAL & HEALTH	ALL OTHERS
Burdett College	D-C				D
Mass. Assoc. of R.E. Boards	C				
N.E. Institute		AS			
School of Museum of Fine Arts					D
Butera Sch. of Art		NR			NR
N.E. Educational Center	C-D			C-D	
Carney Hospital				C	
Barbizon School					C-D
Episcopal Theo. Sem.					N-C-NC
N.E. School of Photography					D-C
College Home Study Center					NC
Academie Moderne					C
Aquines J.C.	Deg.-D				
Hittners School					D
Boston Conservatory					NC
Mass. College of Pharmacy				NC-C	
Academia School of Languages					NR
Imageworks					NC
Bryant-Stratton	C				
Hanover Beauty Acad.			D		
Dale Acad. of Hairstyling			D-L		
ITT Tech. Inst.		NR		D	NR
The Hickox School	NR				
Modern Gourmet, Inc.					D
N.E. Conservatory					
N.E. School of Law					
Nichols College of Bus. Adm.	NR				
Oblate College & Sem.					
Andover-Newton Theo. Sem.					NR
Perry School					
St. Stephen's College					
N.E. Fuel Institute Tech. Training		NR			
Art Inst. of Boston					NR
Sylvania Tech. School		NR			
Gen. Motors Training Center		NR			
Hellenic College					
Longy Sch. of Music					ND
Patricia Stevens Sch.					D
Donahue Civil Service School					ND
Malden Bus. School	D				
Miss Allen Modeling School					NR
Model Cities Higher Ed. Prog.					
Peterson's School of Steam Engineering		NR			
Wilfred Acad.			NR		
Carol Nashe Sch.					NR
Devonaue Acad.			NR		
DiAnthony Sch. of Cosmetology			NR		
Henry Simmons Sch. of Floral Design					NR
LaNewton School of Beauty Culture			NR		
Marshfield Beauty Acad.			NR		
Mary Brooks Sch.	NR			NR	NR
Neponset Circle Welding Sch.		NR			
N.E. School of Hypnotism					NR
Rht. Richard Beauty Acad.			NR		
N.E. Tractor Trailor		D			
Quincy Beauty Acad.			C		
Miss Kelley's School of Electr.			D-L		
Stenotype Internat.	NR				
Tech. Age Bus. School	C				
Touch Shorthand Acad.	NR				
Becher C.P.A. Review Course	NR				
Woburn Bus. Sch.	NR				
Willet Inst. of Finance	NR				
Mass. College of Optometry				NR	
Acad. of Musical Arts					NR
Fashion Signatures					NR
Beauty Culture Acad.			NR		
Griffith School of Speech					NR
Ryder Tech. Inst.		NR			
Cades C.P.A. School	NR				

BEST COPY AVAILABLE

INVENTORY OF PROGRAMS IN PROPRIETARY AND INDEPENDENT INSTITUTIONS

BOSTON REGION

Boston (cont'd)

	BUSINESS & OFFICE	SKILL TRADES & TECHNICAL	COSMETOLOGY	MEDICAL & HEALTH	ALL OTHERS
Project Inc.					NR
Brynan Medix				NR	
Carleton Whitney Aero Serv.					C-1
Copley Secretarial Institute	NR				
John Robert Powers Finish. Sch.					D
Katherine Gibbs	C-D				
Management Devt. Inst.	C				
Mary Lentine Sch. of Hair Design			NR		
School of Fashion Design		NR			
Acad. of Mus. Arts					NR
Beauty Creator Acad.			NR		
Inst. of Mngment. Education	C				
Coyne Elect. & Tech. School		C			
Eleanor F. Roberts Inst. of Electrology			D		
Career Training Inst.	D				
Vesper George School of Art					ND
Carnegie Institute				D	
Sales Training Inc.					C
N.E. School of Mech. Dentistry				NR	
Jean Cappy Inc.			D		
Insurance Library Assn. of Boston	C-NC				
Mass. School of Barbering			NR		
Bay State J.C. of Business	NC				NC
Northeast Inst. of Ind. Tech.		C-D			
Hathaway Sch. of Conservation					NR
Travel School of America					NR
Miss Farmer's Sch. of Cookery					NR
Electronic Computer Proc. Inst.		NR			
Berlitz School of Lang.					NR
Mass. Radio & Electronics		L			
Newbury J.C.	AAS				
Cambridge J.C.					
Cardinal Cushing College					
Chamberlayne J.C.	NR				NR
Franklin Institute					NR
Dolan Gertrude Theatrical Studios					NR
Farr Acad.					NR
Orson Welles Film Sch.					NR
So. Shore Conserv. of Music					NR
Ingo Conservatory of Music					NR

BEST COPY AVAILABLE

INVENTORY OF POSTSECONDARY LEVEL COURSES IN ADULT EDUCATION PROGRAMS

WESTERN REGION

[1] math, history, English etc.
[2] auto mechanics, commercial art, carpentry, electricity, etc.
[3] electronic technology, health technology, commercial pilot
[4] secretarial, accounting, data processing
[5] advanced engineering, marketing, law
[6] social or community service, child care, teaching
[7] home economics, personal development
[8] astrology, women in literature

	ACADEMIC[1]	TRADE & INDUSTRY[2]	TECHNICAL[3]	BUSINESS[4]	PRO-FESSIONAL[5]	SOCIAL[6]	ARTS & CRAFTS	FAMILY & PERSONAL[7]	CULTURAL[8]
Springfield									
Southwick	NR	NR		NR			NR	NR	
Easthampton				NR				NR	
South Hadley	5	4		4	4		1	1	19
Springfield	11	21	1	13			30	119	16
Pittsfield/No. Adams									
Wahconah	1	2	1	2			3		
Mt. Greylock	1	2		1			2	1	
Lenox								30	
Lee H.S.						3	3		
Monument Mt.		3	1		2	1	2	9	13
Amherst/Northampton									
Amherst-Pelham	1		2	2			20	8	4
Greenfield				NR			NR		

CENTRAL REGION

	ACADEMIC[1]	TRADE & INDUSTRY[2]	TECHNICAL[3]	BUSINESS[4]	PRO-FESSIONAL[5]	SOCIAL[6]	ARTS & CRAFTS	FAMILY & PERSONAL[7]	CULTURAL[8]
Worcester									
Tahanto		2		1			1		12
B-M Reg.		2		1			1	1	
Sutton Jr.-Sr.								2	
Bartlett H.S.			1	4			2	7	
Northbridge							3	9	
Worcester	49	15	7	47			117	109	102
Fitchburg/Gardner									
Leominster	NR							NR	
Lunenberg		5		1			2		12
Framingham									
Holliston		4		2			4	7	2
Maynard	5	13		3	3	2	6		
Concord-Carlisle	9	2		8		13	50	27	19
Lincoln-Sudbury	5	1		3		2	10	10	13
Natick H.S.	4	4		9			5	16	12
Hopkinton				1				5	
Milford							15		
Acton-Boxborough		2				2	7	20	11

BEST COPY AVAILABLE

INVENTORY OF POSTSECONDARY LEVEL COURSES IN ADULT EDUCATION PROGRAMS

NORTHEAST REGION

	ACADEMIC[1]	TRADE & INDUSTRY[2]	TECHNICAL[3]	BUSINESS[4]	PRO-FESSIONAL[5]	SOCIAL[6]	ARTS & CRAFTS	FAMILY & PERSONAL[7]	CULTURAL[8]
Lynn/Salem									
No. Reading				1				17	
Lynn Evening	13			6			8	18	1
Danvers		2						16	
Stoneham	2	1		5			7	14	9
Swampscott				2		1	10	6	5
Andover/Lowell									
Masconomet	3	2		3		1	2	4	1
Lawrence								28	
No. Middle School				2			7		
Tyngsboro	1						1	6	2
Tewksbury		1	1	2			14	2	
Dracut									
Chelmsford		4		2			6	13	
Burlington/Bedford									
Wilmington		2		4		1	3	6	

SOUTHEAST REGION

	ACADEMIC[1]	TRADE & INDUSTRY[2]	TECHNICAL[3]	BUSINESS[4]	PRO-FESSIONAL[5]	SOCIAL[6]	ARTS & CRAFTS	FAMILY & PERSONAL[7]	CULTURAL[8]
Fall River/New Bedford									
Acushnet							1	1	
Apponequet		2					1	5	1
Fall River									
Falmouth/Barnstable									
Barnstable		5		2			14		
Brockton									
Norwell				1			3	3	2
Hingham	5	2	1	4	2		20	5	6
Scituate		14		6			14	14	8
Braintree	14	9		7	1		36	1	
Weymouth	2	7		7			9	12	8
Canton				4			10	4	
East Bridgewater							7		
Dartmouth								NR	NR
Foxborough	3		3	7			12	16	7
Medway								NR	

BEST COPY AVAILABLE

INVENTORY OF POSTSECONDARY LEVEL COURSES IN ADULT EDUCATION PROGRAMS

BOSTON REGION

	ACADEMIC[1]	TRADE & INDUSTRY[2]	TECHNICAL[3]	BUSINESS[4]	PROFESSIONAL[5]	SOCIAL[6]	ARTS & CRAFTS	FAMILY & PERSONAL[7]	CULTURAL[8]
Boston									
Milton	5			3			4	4	4
Malden	NR			NR			NR	NR	
Lexington				4			3	3	5
Westwood									
Belmont				1			2	9	
Winthrop	7			5			18	2	
Boston Center for Adult Ed.	53	4		11			57	20	26
Cambridge Center for Ad. Ed.	79	3		5		11	77	23	32

BEST COPY AVAILABLE

INVENTORY OF HOME STUDY SCHOOL PROGRAMS

	BUSINESS & OFFICE	SKILL TRADES & TECHNICAL	MEDICAL & HEALTH	ALL OTHERS	GENERAL ACADEMICS
Chicago Technical College		NR			
Cleveland Inst. of Electronics		D			
Home Study Institute	NC				NC
LaSalle Extension School	NR	NR	NR	NR	NR
Locksmithing Institute		NR			
Ryder Tech. Institute		D			
Stock Market Institute	C-NC				
Internat. Assoc. of Assessing Officers	NR				
Sales Training Inc.		C			
Amer. Soc. for Metals		ND			
Columbia School of Broadcasting				NC	
Internat. Corres. School	D-C	D-C		D-C	D-C
Dan-Donnelley Publishing Corp.	C				
Interstate Training Service		C-NC			
Amer. Med. Record Assoc.	C-NC		C-NC		
Commercial Trades Inst.		NR			
North American Corresp. School	NR	NR	NR	NR	D
Elba Systems Corp.	NC	NC			
Advance Schools, Inc.	NC	NC			
McGraw-Hill Continuing Ed. Co.		C-D			
Career Academy	NC	NC			
Writers Institute				NC	NC
Lincoln Extension Institute	D-C				

Note:
NR indicates a program in field shown but specific degree or certificate not reported.

II.K.4. Cooperation and Coordination

Proprietary Institutions

Cooperative programs in proprietary institutions are discussed in Section II.K.3. Listed here is a table of cooperative programs reported for convenience.

Adult Education Programs

Public school programs are typically independent in Massachusetts, both from the State Department of Education and from each other. Cooperation with other agencies and institutions is limited.

However, there are some notable examples of cooperative efforts with other programs and agencies.

In terms of cooperation with other educational institutions, there are a variety of forms. Some schools have arrangemnnts with colleges to offer classroom space for continuing education courses. Public high schools are in effect branch campuses for college programs.

Some adjacent towns have joined together in offering courses to citizens of both towns. In Lincoln-Sudbury, Concord-Carlisle, and Acton-Boxborough, for example, a joint borchure is published.

Cooperative arrangements with other agencies or institutions are also limited. However, some programs have initiated arrangements which are good examples for what can be accomplished. The Amherst/Pelham School District has designed a community school program with a wide variety of activities taking place in the public schools. Extensive use of facilities and arrangements with local groups result. Other programs cooperate with WIN, MDTA, or employers to offer specific courses.

The potential for cooperative arrangements far exceeds the reality at present. Many directors of programs expressed the views that such cooperation of community activities would be desirable. Possibilities suggested were: offering adult courses in the daytime, regionalization of programs for more diverse offerings, better information and publicity services, programs for senior citizens, and expanded academic or vocational offerings.

COOPERATION AND COORDINATION AMONG PROPRIETARIES

(See also text of Section II.K.3)

Springfield

Vocational Education & Training Corporation:
have trained 3 WIN students & 4 MDTA students (Comm. of Mass.)

Brom's Barber School:
veterans, MDTA, Mass. Rehab. & other state & federal agency students

Pittsfield/No. Adams

Berkshire Christian College:
coop nursing program with Berkshire Community College;
student teaching in local school;
free teachers aides to local schools from educational psychology courses;
Seniors intern for 8 weeks with public & private agencies mostly in social work & churches

Worcester

Leo's Beauty Institute:
"We accept students from approved government agencies."

Framingham

Opticians School of Framingham:
none at present - plans underway for cooperation with local regional vocational school, local state college

Lynn/Salem

Marian Court Secretarial School:
WIN program: 8-12 students/year
Mass. Rehabilitation: 1-2 students/year

Gordon-Cornwell Theological Seminary:
part of Boston Theological Institute (consortium of theological schools in Boston

Burlington/Bedford

Comerford Flight School:
coordination: participate in Army & Air Force "Transition" program (train aviation-oriented members); also participate with Mass. Rehabilitation Commission

Honeywell Institute of Information Science:
training programs for employees taught by faculty members from WPI & Worcester Junior College

Control Data Institute:
credit transfer with Concord College & New Hampshire College; Mass. Rehabilitation, Veterans Rehabilitation, WIN, & MDTA referrals

Fall River/New Bedford

Fall River Beauty Academy:
(1) contract with city of Fall River to train high school students;
(2) enroll students from VA, WIN, Mass. Rehabilitation

Boston

School of Museum of Fine Arts:
affiliations on an exchange basis with Tufts, Emerson, & Simmons

Newbury Junior College:
some tuition repayment plans as part of employment benefits

Bay State Junior College:
none yet, but possibilities are being investigated

Northeast Institute of Industrial Technology:
no formal arrangements but some students are attending with company sponsorship paying all or half tuition

Mass. Association of Real Estate Boards:
occasional co-sponsored courses with Institutes of National Association of Realtors

New England Educational Center:
currently: programs offered in conjunction with Framingham State College;
to begin June 1973: cooperative efforts with Worcester Junior College & New Hampshire College

Barbizon:
some training for government agencies & companies

Rittner's School:
have trained people sent by supermarkets, flowershops & governmental agencies

Butera School of Art:
none but would be willing to cultivate some

Academia School of Languages:
contract with agencies & businesses to provide language instruction

Mass. College of Pharmacy:
(1) course in Financial Management cosponsored by Mass. College of Pharmacy & Bentley College;
(2) cooperative program for elementary & high school teacher & health education coordinators in conjunction with the Institute of Communications & Group Dynamics: to instruct teachers in use of media and other techniques for presentation of drug abuse; course (summer 1973) given at 5 locations in the state; supervised by Mass. Executive Committee for Educational Television; College providing faculty for course

Boston Conservatory:
presentation of performing groups in elementary & secondary schools and colleges

New England School of Photography:
VA, WIN, Mass. Rehabilitation, training for businesses

New England School of Mech. Dentistry:
government sponsorship of students

Bryant & Stratton:
in-plant training for business & industry; curretnly have a program for HEW

ITT Technical Institute:
cooperative training in Medical & Dental Assisting programs with Chelsea Naval Hospital

The Hickox School:
American Institute of Banking, WIN, Mass. Rehabilitation, Mass. Commission on Blind, Jobs Clearing, OIC, MDTA, EEA, Cambridge Economic Opportunity Committee

Eleanor Roberts Institute of Electrology
WIN, Mass. Rehabilitation, VA, MDTA

Sales Training Institute:
have trained salesmen for companies; participate in Vocational Guidance Programs; are curretnly under contract to train all Navy & Coast Guard Recruiters nationally

Mass. School of Barbering:
MDTA, WIN, VA, Mass. Rehabilitation

COOPERATION AND COORDINATION AMONG ADULT EDUCATION PROGRAMS

Springfield

Easthampton Adult Education:
offered Drug Program in cooperation with the Community Action Committee

South Hadley High:
offer U. Mass. continuing education courses when demand is high

Amherst/Northampton

Amherst-Pelham Regional School District Community Services:
(1) buildings, grounds, special facilities & equipment, both public and private, used by total community
(2) cooperation with local agencies and groups, e.g., League of Women Voters, Coast Guard, American Cancer Society, Police Auxiliary, Amherst Human Relations Council, etc.

Worcester

Worcester Public Schools:
(1) work incentive program in clerical skills, basic education, 200 people per year; under contract with Division of Employment Security
(2) National Alliance of Businessmen (NABS) contract to offer job-related courses in businesses and in schools; special 39-week consortiums in banking, insurance, metal trades.
(3) classes at Worcester County Jail serving 90 inmates at a time

Fitchburg/Gardner

Leominster Public Schools:
dropout students referred to high school program by industries, churches, and high school principals

Framingham

Concord Carlisle Regional School District:
cooperative programs with General Radio, Widening Horizons,Inc., Middlesex County Extension Service

Acton-Boxborough
Concord-Carlisle
Lincoln-Sudbury:
Joint brochure making courses in six towns avialable to all, hopefully to permit many courses to run that normally cannot due to under-enrollment

Lynn/Salem

Lynn Evening School:
(1) North Shore Community College presented a teachers aid course.
(2) Commonwealth of Massachusetts Registry of Motor Vehicles sponsored a course on safe boating.
Stoneham Public Schools:
course on first aid in cooperation with the Stoneham Red Cross
Swampscott Public Schools:
one course shared with Beverly Community College; one with the Great Books Foundation

Andover/Lowell

Masconomet Regional School:
(1) First Aid course taught by Red Cross
Tyngsboro Public Schools:
(1) cooperate with neighboring Adult Education programs; are reimbursed by State Department of Education for out-of-town students
Dracut:
from 1966-71 had a Data Processing course associated with Lowell Tech. Institute (equipment & instructor provided by Lowell Tech.)

Falmouth/Barnstable

Barnstable Vocational High School:
a cooperative program with Cape Cod Community College in boat-building and marine mechanics; College pays for instructor and supplies

Brockton

Hingham Public Schools:
program supplemented by courses from Suffolk University and Quincy Junior College

Boston

Lexington Evening School:
Women's opportunity workshop led by Widening Horizons, Inc. of Concord

II.K.5. Fees

Fees for programs in proprietary institutions are typically higher than those comparable programs in the public institutions. Costs per course range from $25 all the way up to $500. However, the total time involved in training is less than in a community college program. Programs may be concentrated in a few months and take less time away from the job. The financial alternatives of the two options are not clear just from an examination of fees. Further, relative cost per student, some argue, is lower in the proprietaries vs. the public community colleges (or other colleges) when total cost to the State rather than just operational costs are considered. The data is not available now to make such a comparison and determine the argument, but such analysis should be made.

Fees in adult education programs are quite low. Some courses are free; typically courses cost $5 or $10. Non-residents of the town pay a higher fee. Courses in basic adult education and evening practical arts which are subsidized by the State charge lower fees. Exceptions are the fees at the two private non-profit evening centers in Boston and Cambridge. They do not enjoy the effective public subsidy of free classroom use in a public school. Fees range from $10 to $100.

Home study schools charge fees ranging from $30 per course to over $2000 per program.

FEES CHARGED IN PROPRIETARIES AND IN ADULT EDUCATION (by area)

	FEE/PROGRAM	FEE/COURSE
SPRINGFIELD		
Proprietary & Independent		
St. Hyacinth College & Seminary	NR	NR
Springfield Hospital Medical Center	NR	NR
Vocational Education & Training Corp.	$ 650 PT&CE	
Brom's Barber School	$ 735 PT	
Adult Education		
Southwick H.S.		$ 10
Easthampton Adult Ed.		$ 1
South Hadley H.S.		$ 5
Springfield Adult Ed.		$ 1 - $10
PITTSFIELD/NO. ADAMS		
Proprietary & Independent		
Berkshire Christian College	$1100 PT	$132
Adult Education		
Waconah Regional		$ 10
Mt. Greylock Regional H.S.		$ 15
Lenox Public Schools		FREE
Lee H.S.		FREE
Monument Mountain Reg. H.S.		FREE; $10
AMHERST/NORTHAMPTON		
Adult Education		
Amherst-Pelham Reg. School District		$ 15
Greenfield Public Schools		$ 5
WORCESTER		
Proprietary & Independent		
Leo's Beauty Institute	NR	NR
Adult Education		
Tahanto Reg. H.S.		$ 10
B-M Reg. Jr.-Sr. H.S.		$ 2
Sutton Jr.-Sr. H.S.		$ 10
Webster Evening School		FREE
Northbridge Jr.-Sr. H.S.		$ 5
Worcester Public Schools		FREE - $10
FITCHBURG/GARDNER		
Proprietary & Independent		
Hunter Aviation	NR	NR
Adult Education		
Leominster Public Schools		$ 3
Lunenburg Public Schools		FREE - $8

	FEE/PROGRAM	FEE /COURSE
FRAMINGHAM		
Proprietary & Independent		
Optician's School of Framingham	$ 500 - 2 courses $ 650 - 3 courses $ 750 - 4 courses	$350
Adult Education		
Holliston Public Schools		$ 14 - $16
Maynard Adult Education		$ 10
Concord-Carlisle Regional		$ 5 - $15
Lincoln-Sudbury Reg. H.S.		$ 17
Natick H.S.		$ 16
Hopkinton Schools		$ 12
Milford Evening Pract. Arts		$ 5
LYNN/SALEM		
Proprietary & Independent		
Marian Court Secretarial School	$ 900 CE&PT	$ 65 CE&PT
Gordon-Conwell Theo. Sem.	$ 190 PT - $49 CE	
Adult Education		
North Reading Adult Ed.		$ 5 - $10
Lynn Evening School for Adult Ed.		$ 1
Danvers Eve. Pract. Arts		$ 1
Stoneham Public Schools		$ 5
Swampscott Public Schools		$ 10
ANDOVER/LOWELL		
Proprietary & Independent		
M. Fazio Inst. of Beauty Culture	$ 645 CE	
Lowell Academy	NR	NR
Hale Hospital	NR	NR
Adult Education		
Masconomet Reg. School		$ 10
Lawrence Voc. School		NR
No. Middle School & Westfield Academy		$ 5
Tyngsboro Public Schools		$ 5
Tewksbury Public Schools		$ 1
Dracut Adult Ed.		$ 5
Chelmsford Adult Ed.		$ 10
BURLINGTON/BEDFORD		
Proprietary & Independent		
Comerford Flight School	$ 500 CE	
Honeywell Inst. of Info. Sci.	$1950 CE&PT	
Adult Education		
Wilmington Evening School		FREE - $5

	FEE/PROGRAM	FEE/COURSE
FALL RIVER/NEW BEDFORD		
Proprietary & Independent		
Taunton Beauty Academy	$ 595 PT&CE	
New Bedford Beauty Acad.	$ 550 PT&CE	
Fall River Beauty Acad.	$ 545 PT&CE	
Swain School of Design	$ 200 PT - $80 CE	$125 PT - $80 CE
Adult Education		
Acushnet Public		FREE
Apponequet Reg. Voc. H.S.		$ 2
Fall River Public Schools		NR
FALMOUTH/BARNSTABLE		
Adult Education		
Barnstable Voc. H.S.		$ 4
BROCKTON		
Proprietary & Independent		
Brockton Acad. of Beauty Culture	$ 625 PT&CE	
Adult Education		
Norwell Public Schools		$ 2
Hingham Public Schools		$ 5 - $10
Scituate H.S.		$ 5 - $10
Braintree School Dept.		$ 5 - $10
Weymouth Evening School		$ 20
Canton Public School		$ 2 - $24
E. Bridgewater H.S.		$ 3
Dartmouth Public Schools		NR
Foxborough Adult Ed.		$ 10 - $15
Medway Public Schools		NR
BOSTON		
Proprietary & Independent		
Imageworks		$150 PT
Sch. of Mus. of Fine Arts	$1650 CE	$110 CE
Burdett		$108 PT - $85 CE
Newbury J.C.	$ 240 PT&CE	$120 PT&CE
Bay State J.C.	$ 300 PT	
N.E. Inst. of Indust. Tech.	$ 390 CE	
Mass. Assn. of Real Estate Bds.		$100 CE
N.E. Institute	$1220 PT&CE	$ 18.50/cred.hr. PT&CE
N.E. Educational Center	$ 65 PT	
Carney Hosp.	FREE	
Barbizon	$1995 CE	$595 CE
Episcopal Theo. School	$ 60 CE	
Academie Moderne Mod. School	$ 395 CE	
Aquines J.C.	NR	NR

	FEE/PROGRAM	FEE/COURSE
BOSTON		
Proprietary & Independent (cont'd)		$ 495 night cour
Rittner's School		$ 430 short acti
Butera School	NR	NR cour
Academia Sch. of Lang.		$ 53 - $851
Mass. Coll. of Pharmacy		$ 25 CE
Vesper George School of Art	$ 200 CE	
College House Study Center		$ 110 PT
Boston Conservatory	NR	NR
N.E. School of Photography		$ 160 PT
N.E. School of Mech. Dentistry		$ 400 PT - $800
Bryant & Stratton		$ 30/semester h
Hanover Beauty Acad.	$ 650 PT	
Dale Acad. of Hairstyling	$ 675 PT&CE	
ITT Tech. Inst.		$ 14/wk. PT
The Hickox School	$65-100 PT - $40-50 CE	
Modern Gourmet	$ 80/5 wk. unit	
Coyne Elect. & Tech. Sch.		$ 295 CE
Eleanor F. Roberts Inst. of Electrology	NR	NR
Career Training Inst.	NR	NR
Carnegie Institute	$ 400 PT	
Sales Training Institute	$1112 PT	
Jean Cappy	$ 695 PT	
Insurance Lib. Assn. of Boston	NR	NR
Mass. School of Barbering	$ 790 CE	
Adult Education		
Milton Public Schools		$ 20
Malden Evening High School		FREE for reside $ 15 non-reside
Lexington Evening School		$ 10.50 - $15
Belmont Public Schools		$ 5 - $20
Winthrop Center for Adult Education		$ 2.50
Mass. Dept. of Education Bureau of Adult Services		$ 11 - 43
Boston Center for Adult Education		$ 10 - $100
Cambridge Center for Adult Education		$ 22 - $50

FEES CHARGED IN HOME STUDY SCHOOLS WITH MASSACHUSETTS RESIDENTS

LaSalle Extension University, Chicago	$350-$595/course
Cleveland Inst. of Electronics	$495-$795/course
Ryder Tech. Institute	$745-$895/course
Stock Market Institute	$250-$750/course
Home Study Institute	$30-$100/course
Chicago Technical College	$240/course
American Tech. Society Chicago	$9.60/$148/subject
Sales Training Institute	$1112/program
Columbia School of Broadcasting	$995/program
ICS	$435-$2295/program
Interstate Training Service	$500/course
American Medical Record Assn.	$475-695/course
No. American Correspond. Schools	$159-$817/course
Elba Systems Corp.	$1105-$1777/course
Advance Schools, Inc.	$590-$1495/course
McGraw Hill Cont. Ed. Co.	$175-$575/course
Career Academy	$1098/course
Writers Institute	$329/course
Lincoln Extension Inst.	$25-$496/course

II.K.6. Student Clienteles

Proprietary and Independent Institutions

There appear to be two types of clienteles in proprietary institutions. First are the students clearly enrolled for job-related reasons. They are taking courses in proprietaries for job skills, either beginning or refresher courses. In this category are many types of students: young high school graduates, dropouts, housewives, returning veterans. They are likely to be lower-middle and middle class in background. Some trade schools cater largely to men; other schools, such as business and cosmetology, cater to women.

A second but smaller group of students are those enrolled for recreational reasons. They are taking courses in art schools, cooking schools, language schools, and flight schools. These students are likely to be middle or upper-middle class in background.

Adult Education Programs

The suburban housewife is the typical student in adult education programs. She is enrolled for leisure-time, self-enrichment courses. She is middle-class and middle-aged. Many of the traditional courses in homemaking and crafts are geared to this group. Other students, including men, are enrolled to learn new work skills, and for leisure and hobby interests.

The Boston and Cambridge Centers for Adult Education attract the young, single, and professional group in the Boston metropolitan area (see Section IV.2 for a discussion of the clientele of the Boston Center).

Home Study Schools

Home study students are likely to be men interested in new job skills. They are generally upper lower to lower middle class in background.

BEST COPY AVAILABLE

STUDENT CLIENTELE IN PROPRIETARY AND INDEPENDENT INSTITUTIONS

WESTERN REGION

Institution	Clientele	Reasons for Enrolling
SPRINGFIELD		
Vocational Education & Training Corp.	men ages 12-45	good salary & opportunity to travel
PITTSFIELD/NO. ADAMS		
Berkshire Christian College	recent h.s. grads, housewives, men changing careers	
Simon's Rock	recent h.s. grads, post-secondary seminarians, returning adults, 50% M 50% F, all middle-upper middle class	intellectual stimulation

CENTRAL REGION

Institution	Clientele	Reasons for Enrolling
WORCESTER		
Leo's Beauty Institute	married housewives, h.s. grads, some gov't funded programs	
FITCHBURG/GARDNER		
Hunter Aviation	Ages 17-30	for employment, business, or recreation
Burbank Hospital	recent h.s. grads, some with 1 or 2 years junior college, all under 30 years	
FRAMINGHAM		
Opticians School of Framingham	middle class, age 20-middle age	seeking new job skills or refresher courses

BEST COPY AVAILABLE

STUDENT CLIENTELE IN PROPRIETARY AND INDEPENDENT INSTITUTIONS

NORTHEAST REGION

Institution	Clientele	Reasons for Enrolling
LYNN/SALEM		
Marian Court Secretarial School	recent h.s. grads, housewives returning to work, college students, mostly poor & lower middle class	for better position as secretary
Gordon Conwell Theological School	college grads, some alumnae, middle class suburban whites	seeking ordination into Christian ministry
ANDOVER/LOWELL		
M. Fazio Institute of Beauty Culture	all types	
Lowell Academy	housewives, h.s. students, gov't trainees, trade school grads, age 16-50	seeking professional background, or different field
Hale Hospital	h.s. grads, mostly white, female, early 20's	don't know what they want to do, some who like interpersonal relationships
BURLINGTON/BEDFORD		
Comerford Flight School	recent h.s. grads, businessmen & women, other professionals, veterans, gov't trainees, age 25-30	50% are career-oriented, 50% for business and pleasure
Honeywell Institute of Information Sciences	recent coll. grads, returning veterans, recent h.s. grads, early 20's, male, some underemployed	job improvement
Control Data	h.s. or college grads, dropouts, veterans, housewives, low-upper middle class, mostly in 20's	seeking new skills, job advancement

SOUTHEAST REGION

Institution	Clientele	Reasons for Enrolling
FALL RIVER/NEW BEDFORD		
Fall River Beauty Academy (Taunton Academy same)	recent h.s. grads, gov't trainees, housewives, h.s. dropouts, retirees	seeking job & "glambur" of beauty career
Swain School of Design	gov't trainees, housewives, those looking for retraining, mostly middle class	some want professional training in art, others to develop a vocation
BROCKTON		
Brockton Academy of Beauty Culture	h.s. grads, gov't trainees, suburban housewives, WIN, MDTA, Rehabilitation	seeking new job skills

BOSTON REGION

Institution	Clientele	Reasons for Enrolling
BOSTON		
Imageworks	Upper middle class, mostly college grads	looking for new means of personal expressio
Burdett	90% male, h.s. grads, age late 20's	job advancement
Newbury Junior College	lower middle class, h.s. grads, age 20-30	job advancement
Bay State Junior College	recent h.s. grads, middle income, all women	career skills & opportunities
Northeast Institute of Industrial Technology	company employees, h.s. grads, veterans, older students, 99% male	seeking new job skills, or skills for advancement in present employment
N.E. Institute of Anatomy	recent h.s. grads, older persons	

BEST COPY AVAILABLE

STUDENT CLIENTELE IN PROPRIETARY AND INDEPENDENT INSTITUTIONS

BOSTON REGION

Institution	Clientele	Reasons for Enrolling
N.E. Educational Center	recent h.s. grads, gov't trainees, suburban housewives, ages 18-50, lower middle income	retraining for labor market, updating skills
Carney Hospital	grad R.N.'s	to advance education
Barbizon School	h.s. students, recent h.s. grads	seeking career skills & training
Episcopal Theological Seminary	clergy, some laymen, ages 25-65	
Academie Moderne	middle & upper class	seeking career in modeling or self-improvement
Aquinas Junior College	college grads, housewives, all women, mostly middle income, white	seeking job skills
Buters School of Art	all types	want to learn art
Career Training Institute	recent h.s. grad, gov't trainnees, suburban housewives, low income	to increase earning power by learning an employable skill
Carnegie Institute	varied	seeking new occupation
Dale Academy of Hairstyling and Beauty Culture	recent h.s. grads, gov't trainees, housewives, age 16-60	seek career training
ITT Tech	h.s. grads, dropouts, veterans, housewives, middle income, mostly male	want to learn a technical occupation & skills
The Hickox School	wide range in socio-economic level, age (12-75), education, race	
Modern Gourmet	housewives & professionals, upper middle class	to be a better hostess, to learn true "French" techniques
Coyne Electrical & Tech. School	men working in electrical trade	
Eleanor F. Roberts Institute of Electrology	h.s. grads, housewives, ages 18-55, 80% female	desire to help others, for career opportunities
Academia School of Languages	Business & professional people, prospective tourists	for language requirements in work, travel
Mass. College of Pharmacy	elementary & secondary school teachers, pharmacists	for Drug Abuse education, for refresher courses
College House Study Center	mostly h.s. & college students, some high risk students, housewives	
Boston Conservatory	children & adults, wide range	to begin to develop skills in the Performing Arts
N.E. School of Mech. Dentistry	all types	job improvement
Bryant & Stratton	housewives, recent h.s. grads, gov't trainees, employees of business firms	
Hanover Beauty Academy	h.s. grads, h.s. students, gov't trainees, housewives, mostly early 20's, white	seeking new job skills
Mass. Assn. of Real Estate Boards	professionals, retirees, R.E. salesmen, & brokers, age 20-65, middle income	develop professionalism & increase earnings, some seeking new job skills
Museum School (of Museum of Fine Arts)	ages 18-25, white M & F	to prepare for full time program in art, for personal interests
Sales Training Institute	h.s. grads, many others	desire to be effective with people and to increase earnings
Jean Cappy Inc.	all types	skill improvement
Insurance Library Assn. of Boston	recent h.s. grads & others, 2/3 male, age 21-45	want to pursue a career in insurance or for skill improvement for employment

BEST COPY AVAILABLE

STUDENT CLIENTELE IN ADULT EDUCATION PROGRAMS

WESTERN REGION

Institution	Clientele	Reasons for Enrolling
SPRINGFIELD		
South Hadley High School	white, middle class, primarily female, h.s. grads	to develop some vocational or avocational skill or interest
Southwick High School	middle class, mostly women over 30	seeking to learn new skills, or for new experiences
Easthampton Adult Education	age 16-60, 75% female, many of Polish decent	for personal achievement, use of spare time
PITTSFIELD/NO. ADAMS		
Lee High School	men age 25-50, housewives	to find activities for leisure time
Mt. Greylock Regional High School	mostly middle-aged housewives	enjoyment, self-enrichment, self-improvement, to learn skills & crafts
Waconah Regional	recent h.s. grads, suburban men & women, some senior citizens (retired)	to develop avocational skills or interests
Lenox Public Schools	housewives	
Monument Mt. Regional	students completing h.s. diploma requirements, suburban housewives, other community members	to develop new interests
AMHERST/NORTHAMPTON		
Amherst-Pelham Regional School District	a composite of community, upper-middle class, 70% female, ages 16-80	personal interest & involvement
Greenfield	mostly white women, middle income, middle age & older	to develop activities for leisure time, some demand for job training programs

CENTRAL REGION

Institution	Clientele	Reasons for Enrolling
WORCESTER		
Northbridge Jr.-Sr. High School	mostly housewives, middle income, ages 25-60, most have h.s. diploma or less, some college	desire to learn skills
Tahanto Regional High School	housewives (90%), middle income	
B-M Regional Jr.-Sr. High School	65% female, age 30-40, low-middle income	
Sutton Jr.-Sr. High School	suburban housewives, age 20-50, low middle income	
Webster Evening School	office workers, housewives, recent h.s. grads, middle income	interest & self-improvement
FITCHBURG/GARDNER		
Leominster Public Schools	middle income, age 20-45, mostly female, many factory workers	to improve work skills, employment status, to learn to read & write English
Lunenburg Public Schools	middle aged white, upper middle income, women wanting to return to work	to learn specific skills, enjoyment of social aspect of program
FRAMINGHAM		
Holliston Public Schools	mostly housewives & some husbands, recent h.s. grads, middle income	interest
Maynard School Department	middle income, middle-aged, white, mostly housewives	to develop leisure-time, hobby-type activities
Concord-Carlisle	white, middle income, women, aged 20-60	self-improvement, interest in home & community, some interest in careers

STUDENT CLIENTELE IN ADULT EDUCATION PROGRAMS

CENTRAL REGION

BEST COPY AVAILABLE

Institution	Clientele	Reasons for Enrolling
FRAMINGHAM (cont'd)		
Lincoln-Sudbury Regional High School	h.s. students, dropouts, recent h.s. grads, young working people, young marrieds, older couples, housewives, retired people	h.s. students for credit, adults mostly for cultural enrichment
Natick High School	mostly housewives, middle-upper income, white, middle aged	interest in developing skill or talent, most for personal development, some for job advancement
Hopkington School System	all middle income white, age 20-40, mostly h.s. grads, housewives	recreation, diversion, chance to develop hobbies
Milford	homemakers, professionals, anyone over 16	interest in learning a craft

NORTHEAST REGION

Institution	Clientele	Reasons for Enrolling
LYNN/SALEM		
No. Reading Public Schools	mostly housewives, some wishing to return to work, middle income, age 20-70	for personal interests & improvement
Lynn Evening School	recent h.s. grads, professionals, housewives, retired persons, most have h.s. diploma	for interest & skills in crafts, also some interest in job improvement skills
Danvers Evening School	mostly women, big age span	for hobbies, crafts & homemaking skills
Stoneham Public Schools	suburban housewives, some male homeowners, some foreign born, ages 18-80	avocational & leisure time interests, some seeking job reentry skills
Swampscott	housewives, business & professional people, some office, clerical & service workers, some retired men & women, 75% female, most upper middle income	for personal enrichment, hobbies, crafts & homemaking skills
ANDOVER/LOWELL		
Tyngsboro Public Schools	parents, recent h.s. grads, 85% housewives, age 25-45	practical art courses for personal improvement
Masconomet Regional	recent h.s. grads, housewives, middle income	some seeking new job skills, others self-improvement & leisure time interests
No. Middle School & Westford Academy	mostly suburban housewives, middle income, age 35-50	interest in developing hobby & leisure time activities
Tewksbury	recent h.s. grads, housewives & husbands (middle age)	looking for hobbies
Dracut Adult Education	mostly women, middle income, white, with h.s. diploma	avocation interests
Chelmsford Adult Education	suburban housewives & husbands, middle income	vocational skills, personal & social interests
BURLINGTON/BEDFORD		
Wilmington Evening School	recent h.s. grads, housewives, middle income, age 25-60, tradesmen, office workers	occupational advancement or pleasure

BEST COPY AVAILABLE

STUDENT CLIENTELE IN ADULT EDUCATION PROGRAMS

SOUTHEAST REGION

Institution	Clientele	Reasons for Enrolling
FALL RIVER/NEW BEDFORD		
Achushnet Public Schools	suburban housewives and other community residents	to upgrade skills
Aponoquet Regional Vocational High School	suburban, rural men & women, age 30-55, mixed occupations	avocational interests
Fall River Public Schools	those with less than 8th grade education	to bring adults up to 8th grade level
FALMOUTH/BARNSTABLE		
Barnstable Vocational High School	h.s. students, housewives, men & women of all occupations, ages & socio-economic groups	to improve job skills & earning ability, to learn crafts & hobbies
BROCKTON		
Norwell Public Schools	suburban housewives, middle income	skills, fulfillment, enrichment for leisure time and home improvement, intellectual stimulation
Hingham	middle-aged housewives & husbands, senior citizens	enjoyment & avocational interests
Scituate	mostly women over 30, some recent h.s. grads	leisure time interests
Braintree School Department	h.s. grads, housewives, upper middle income	mostly for recreation, 15% for job advancement
E. Bridgewater High School	90-95% women, age 20-60	learning crafts for leisure time activities
Foxboro	mostly housewives	enjoy an evening out while learning a new skill

BOSTON REGION

Institution	Clientele	Reasons for Enrolling
BOSTON		
Weymouth Evening School	housewives, senior citizens, businessmen, white age 20 and up	to develop personal skills & social interaction, also to learn employable skills
Canton Public Schools	mostly housewives	interest in home improvement skills and ways to use leisure time
Milton Public Schools	middle-upper middle income retired people & housewives	interest in developing leisure time activities
Malden Evening School	mostly middle income, age 20's-40's, 80% women, 60% h.s. grads, 40% no h.s. diploma	non h.s. grads to get h.s. diploma, for others mostly to learn hobbies or new homemaking skills
Lexington Evening	suburban housewives, wide range of ages	to learn a skill for recreation or hobby, also social aspect

STUDENT CLIENTELE IN HOME STUDY SCHOOLS

BEST COPY AVAILABLE

Institution	Clientele	Reasons for Enrolling
Chicago Tech. College	all male, h.s. grads	lack of finances for a resident college
Cleveland Inst. of Electronics	mostly male, age 16-60, h.s. students, white and blue collar workers	
Home Study Institute	all types, many college students working toward a deg. & teachers renewing certification	
Ryder Tech. Institute	60% h.s. grads, age 24-26, low income	like travel, working alone, & traffic, desire better earnings
Stock Market Institute	generally college grads or better, age 25-55, mostly male, some retirees	learn new job skills, desire for a second income
Internat. Assoc. of Assessing Officers	95% members of association	
Sales Training Institute	ave. age: 28, 95% male, varied economic bkgnd., ave. ed.: 1 yr. college	better employment opportunities
Columbia School of Broadcasting	98% male, age 18-30, varied bkgnds. & occupations, 39% vets	
Internat. Corresp. Schools	93% male, age 18-30, low employment & economic status, occupations varied	strong desire for advancement & self-improvement
Dan Donnelley Publishing Corp.	primarily from banks, factoring organizations, industrials, service & retail organizations	
Interstate Training Service	mechanical workers sponsored by employers, all male, age 19-51	upgrading & retraining on-the-job
American Med. Records Assoc.	mostly female, age 22-45, employed in a Medical Record facility	to upgrade present employment status & salary
Commercial Trades Institute	mostly male, mid 20's, upper-lower to lower-middle class, most in vocational occupations	to obtain theory & practice work for a new career
North American Corresp. Schools	education varies from no h.s. diploma to college deg.	job training
Elba Systems Corp.	all affiliated with a life insurance co. or license broker dealer	to increase selling skills & income while preparing to move into field sales management
Advance Schools, Inc.	age 25-65, education varies from grade school to some college, income: middle to low	upgrade or learn skills, supplement income with p-t employment
McGraw-Hill Continuing Ed. Co.	50% military, most married, with tech. school or college credits, most engaged in some aspect of engineering support work, ave. age: 25, low income	
Career Academy	age 20's to 30's, all other status varies according to course of study	
Writers Institute	varied backgrounds, ages, & occupation, many enrollees house-bound	
Lincoln Extension Institute	mostly male, ave. age: 30, married, 1-5 yrs. job experience, low income	

BEST COPY AVAILABLE

L. Employer-Based Education Programs

DISCUSSION II-613
- Representative Employer-Group Education Programs. II-614
- In-House/Outside Programs II-615
- Traditional Higher Education and Employer-Group Interest in an "Open University". II-620

1. Table: Employer Connections with Continuing and Part-time Education Programs in Massachusetts Colleges and Universities II-622

DISCUSSION OF EMPLOYER-BASED PROGRAMS

Employer groups in Massachusetts which carry on extensive education and training programs vary greatly in the kinds of programs they operate. This variety depends upon the nature, size, and location of the employer-group; whether it is in the public or private sector, profit or not for profit; if an industrial firm, whether it is manufacturing- or service-oriented; whether it is a "giant" (5,000 or more), "large" (1,000 or more), or "medium sized" (600 or more) employer; and whether it is located in Boston's hub, or on Route 128, or in Worcester. All of these factors will affect the character of a given employer group and thus the character of its education and training program.

Exemplary programs representative of large scale educational operations common among governmental agencies, health care facilities, manufacturing industries, and several service industries are identified and described. Eight employer groups were contacted, persons responsible for education and training interviewed, materials descriptive of these programs obtained, and both interview and published literature analyzed. The employer-groups in the survey were: the Raytheon Company (Missile Systems Division/Bedford Laboratories), Polaroid Corporation, the Employe Training Section of the Commonwealth's Bureau of Personnel, Honeywell (Information Services Organization), First National Bank of Boston, Boston Chapter of the American Institute of Banking, John Hancock Mutual Life Insurance Company, and the Massachusetts General Hospital.

As already suggested, the eight employer-sponsored education and training programs in this survey are generated by diversified educational needs and demands. They would seem to be much more heterogeneous than eight randomly surveyed college- or university-based continuing education programs might appear. In one instance, for example, functional definitions or "education" range from routinized clerical and paratechnical training within personnel departments to the broadest and deepest kinds of advanced learning at doctoral and postdoctoral levels which are considered vital to the corporate mission.

Other examples of this variety exist as well. Some groups rely almost exclusively on "in-house" training, educational and even academic staff resources for their programs. Others prefer extensive outside contractual relations with colleges and universities to perform all but the most "personnel related" educational tasks. Some programs are emphatically "job-specific"; others are discipline, subject or problem and task-oriented; still others emphasize personal growth and development (the "whole person" approach).

The kinds and amounts of support employer groups pour into education vary considerably. Dollar amounts budgeted are, in the private sector at least, confidential and thus no dollar comparisons are available. Nevertheless, it is possible to see the varieties in sources and amounts of funding employer-groups use for the continuing education of their employees. Organizations correspondingly vary in their reasons for mounting basic education endeavors for the disadvantaged. Some have made it a primary responsibility and are devoting the necessary resources to do the job; others see it as a peripheral but highly necessary and visible activity for purposes of "corporate responsibility."

The employer-groups surveyed not only differed in the nature of their connections with the continuing education programs of colleges and universities, but the widest possible range of feelings of satisfaction and dissatisfaction with these programs were expressed. The dominant response, however, was extreme dissatisfaction with higher education's understanding of employers' educational needs and with its ability to "deliver the goods" of relevant learning at reasonable costs and in contemporary formats. Thus, universally high interest was manifested in response to the description of the possibilities afforded by the Massachusetts Open University; e.g., employer-group control over learning content and format, independent assessment, and availability of accredited external degrees. Employers expressing moderate to high satisfaction with a particular higher educational institution, for example, did so on the basis of these "MOU" types of considerations.

For all of their diversity, employer-groups with extensive training and educational programs are alike in having a functional view of their educational operations. Educational programs exist to further the well being of the parent organizations. Educationally, whatever furthers this end becomes the program. This specificity of missions is the chief characteristic of employer-group education and helps to explain its diversity and heterogeneity.

Representative Employer-Group Education Programs

A large employer-group differentiates "training" and "education" programs. Training programs related to job orientation, skills and performance improvement, as well as performance evaluation and promotions are most often operated by the personnel department. This is the case particularly of on-the-job training (OJT) for clerical and technical employees, supervisory staff, and lower-echelon management positions.

Education programs are most often operated by a separate education staff, sometimes with considerable autonomy. Education programs cover such activities as adult basic education (ABE), high school and college level equivalency courses operated "in-house" by employer-group staff, postsecondary education courses and programs funded and sponsored by the employer-group but operated by outside educators, and a variety of tuition-paid plans for employees applicable at surrounding colleges, universities or other educational organizations.

There is considerable overlap, however, between these two types of programs. Some of the large technological manufacturing firms such as Raytheon and Honeywell emphasize advanced education because of the nature of their product (e.g. appropriate learning of skills is most often scientific and technological in nature) while a large service firm such as John Hancock operates educational programs which might be classified as "training" by other kinds of public and private service groups. Whether programs are essentially "training" or "education" oriented usually depends upon their distance from and independence of the personnel department. All of the employer-groups surveyed, however, were sufficiently large or dependent on educated workers to mount significant and highly effective educational (as opposed to training) programs. This is true whether the educational program is done primarily in-house, primarily by outside educators, or--as is often the case--by both.

In-House/Outside Programs

The eight employer groups surveyed all conduct a number of significant in-house activities. All operate personnel-oriented training programs of the kind referred to above. All operate some kind of ABE program for employees, although these programs vary enormously in the emphasis they receive and thus vary considerably in educational quality. All the employers offer to their personnel tuition-paid plans which for the most part are utilized in the part-time and continuing education programs of surrounding colleges and universities. Policies for tuition-paid plans vary. In general, employees must be full-time, and permanent, with a satisfactory job record and evidence of ability to benefit from such outside learning. Beyond this, policies differ and practices even more. Job-relatedness, supervisor's permission, monitoring by the personnel or education department, limitations regarding number or level of courses, and tuition payment itself (whether prepaid, postpaid; direct institutional payment or employee voucher system, and so forth) are strictly or broadly defined depending upon the employer-group's estimate of the kind of investment it is making and what returns it expects.

Some groups, by and large those in the public sector, tend to be fairly restrictive in policy and practice because of limited resources for extensive tuition payments. Resources are allocated instead to sponsored educational programs in which employees are encouraged to participate. Other groups, such as the large firms, encourage as much educational variety and breadth as the person finds valuable through doctoral and postdoctoral programs. The number of persons who are able to take advantage of such extensive use of the tuition plan is of course extremely small. In contrast, the number of employees who take a fair number of career-oriented courses at the undergraduate or master's level is sizeable among all eight groups. First National Bank's tuition assistance plan currently supports 200 employees in part-time study (out of a work force of 4000); 20% of these are at the graduate level. Just as employer and employee benefit from the wide implementation of tuition-paid policies, so too do the educational institutions through this indirect but significant support of continuing and part-time education by employer-groups.

The reader is referred to Section III.A of this report where questionnaire responses of students in continuing education indicate that a substantial percentage of men and women have all or part of their continuing education paid for under employer tuition payment plans.

Another category of employer-based education is formal employer-group connections with continuing and part-time education programs. In these joint arrangements many employer-groups perform most effectively their educational function and many continuing education programs carry out their most extensive and comprehensive career and occupational education objectives.

A variety of these "employer connections" are displayed in the following tables. One such connection is between the Raytheon Company (Missile Systems Division/Bedford Laboratories) and the various programs it sponsors through Fitchburg State College, Lowell Technological Institute, and Middlesex Community College. The Fitchburg program is the most extensive and unique of all such connections identified in this study. Established in 1963, three degree programs in computer science, electrical engineering, and engineering management leading to a B.S. in industrial science were enrolling 500 Raytheon employees by the Fall term of 1972. The educational requirements of Raytheon/Bedford are such that one-third of Bedford's employees is enrolled in a college course at any one time; this adds up to 1500 enrollees per year. In addition 3000 employees have the bachelor's degree, 500 to 600 the master's, and 80 to 100 the doctorate. The need for the latest advanced scientific learning is so great that all Ph.D.'s must take at least some course work every three years. To meet some of the post-baccalaureate demand, Raytheon/Fitchburg are beginning a computer science (software) M.S. program for Raytheon employees in September 1973.

The chief characteristics of the Raytheon/Fitchburg State "connection" are: a corporate management which gives the highest priority to quality education, a corporate education staff which performs ably in both industry and education, a college administration which recognizes and supports imaginative and vigorous outreach and service functions, a continuing education staff which recognizes learning and expertise where it exists and is flexible enough to utilize it to the fullest, and the closest possible cooperation between the employer-group and educational institution. Raytheon pays the bills and Fitchburg awards the degrees. The college guarantees academic credibility by making Raytheon/Bedford in effect a branch campus. Course and program content is determined by Raytheon. Raytheon staff are used as teachers and hold adjunct status on the Fitchburg faculty. Course design and adjunct appointments are approved ultimately by the college, but in practice the program is Raytheon's. Courses are conducted at the Raytheon facility.

Banking institutions have extensive educational needs for banking education needs which are only in part met by individual banks "in house" programs or in connection with colleges and universities. The First National Bank of Boston is a good example. Its training department conducts programs for the bank's clerical needs, including a one-month teller training program considered one of the best in the nation. At the management level, all employees have college degrees and M.B.A.'s and need skills in lending, retail banking, computers, investment analysis, and international banking. In a fairly narrow and limited technical manner the bank provides upgrading of skills in these areas through its own training resources. For the more demanding accounting skills of incoming employees, First National uses the continuing education program at Bentley College in Waltham. Insofar as banking education and finance are concerned, First National relies on the Boston Chapter of the American Institute of Banking (A.I.B.) to provide its advanced educational needs.

While not a formal academic institution in the traditional sense, A.I.B. worldwide is comprised of 350 autonomous chapters with, last year, 100,000 persons taking its course offerings. This makes it the largest adult education program in the world with the exception of military programs. The Boston Chapter of A.I.B., in common with other A.I.B. units, is a nonprofit corporation acting as an education clearinghouse for banking and financial institutions in the area. In 1971-72, it offered a broad schedule of general and special courses (113 classes with 3,503 registrations in 46 courses), management programs with Babson College, secretarial training programs with the Hickox School, A.A., B.A., and M.A. programs offered in conjunction with Suffolk University, and, the most significant, development of the "Selective Programs in Banking Education." Ninety-two students from thirty-six area banks were enrolled in the first year of its operation.

First National and other banks have the services through the A.I.B. not only of a specially tailored educational institution but those of an educational broker as well. 450, or 5.5%, of First National's employees are currently enrolled in A.I.B. courses. Actual affiliations with academic institutions are limited to a few programs with very particular purposes, while most of the educational work is conducted by the A.I.B. using its own faculty drawn from banks, commerce, government, and the universities.

The descriptions of Raytheon and A.I.B. programs indicate ways significant education is being undertaken by employer-groups on the "periphery" of the colleges and universities' continuing and part-time education programs. In the following tables, other programs are described and are, in their own way, equally impressive.

By sheer weight of numbers and scope of programs, both of the training and education type, the Employe Training Section of the State Bureau of Personnel carries on one of the most significant educational programs in the Commonwealth. Under the auspices of the Intergovernmental Personnel Act (1970) and through the Institute for Governmental Services at U./Mass.-Amherst--only one of its activities--the Employe Training Section enrolled 1500 state employees and 2500 municipal employees in training and education programs for 1972-73.

At the Massachusetts General Hospital--one of the largest health care employers in the country--education and training programs encompass at least eight programs which prepare students for careers within health care fields at M.G.H. Four are undertaken in affiliation with other educational institutions. Employees are offered six formal training programs (as various technicians and aides) in addition to special programs (such as English as a second language) and OJT. While employee programs are extensive and of obvious merit within M.G.H., they are overshadowed by and uncoordinated with the professional departments and schools (i.e., medicine and nursing), both affiliated and nonaffiliated, which traditionally have dominated the large training hospitals such as M.G.H. The entire range of M.G.H.'s programs as a "teaching hospital" are under intensive study, however, and the end result may be greater recognition and utilization of M.G.H.'s overall resources as a learning institution.

The Polaroid and Honeywell Corporations are two manufacturing employers which have made heavy investments in education as primary corporate commitments. Both maintain a few connections with academic institutions (see following tables) but their major education programs are undertaken using their own resources. In Honeywell's case these programs are for extensive national and international marketing purposes. Polaroid's programs are for "in house" needs and to fulfill "corporate responsibilities" to the community as perceived by Polaroid's leadership. These employers have initiated quite different educational programs, but both are examples of the degree to which adult and career education in general and continuing and part-time postsecondary education in particular are being pursued by many thousands of persons outside traditional colleges and universities.

In 1969, the Honeywell Institute was established to market a 480 hour course of instruction in computer studies and data processing, to be undertaken by students over 12 work weeks. Early in 1973, Honeywell phased out the Institute because a large enough market of qualified students could not be found who could profit from the Institute and still enable the Institute to operate on a profit basis.

Honeywell has opted for a new Self-Instructional System to replace the "stand-up" courses of the Institute. Beginning in 1971, SIS offered a product-oriented program in all phases of the fundamentals of data processing. By Spring 1973, the 12 Basic Courses were being offered in 20 Honeywell education centers around the country. Ranging from 24 through 80 hours of instruction per course, with 40 hours the average, the centers now train between 20,000 and 30,000 persons per year. Advanced Training is provided at Honeywell Centers to train the trainees for field work, to provide customer courses at the centers, and for internal staff training in Honeywell hardware. 75% of Honeywell's clients are commercial groups and 25% are educational institutions.

The educational clients use the Honeywell SIS in three ways: as a complete computer curriculum (at the vocational-technical high schools, for example), as a supplement to regular computer courses at the college level, and in adult and continuing education programs where SIS has found a ready market (Holyoke Community College, for example). Honeywell reports college and university resistance to SIS becoming a major feature in the computer science curriculum.

For its employee continuing education program, Honeywell contracts with several area colleges for courses either at Honeywell Education Centers or on campus (see tables). Although similar to Raytheon in contracting with area colleges, the program is modest in size.

Polaroid, on the other hand, prefers to use its own resources rather than directly contracting with educational institutions. The firm has an extensive tuition plan on which it expended $400,000 in tuition grants to employees last year and 10% of its employees participated. Its largest educational undertaking is a three-year old Fundamental Verbal Skills program consisting of English as a second language (ESL), General Education Diploma (GED), and Adult Basic Education (ABE). One hundred and sixty-eight employees per year are enrolled in FVS as a logical outcome of Polaroid's vigorous outreach program. Polaroid also operates "Company Courses", a high school equivalency program enrolling 140 employees per year, and an advanced training program for career development. As in the FVS endeavor, Polaroid depends entirely upon its own especially recruited staff for faculty. Emphasis is upon not only company needs but the overall educational needs of the person as well. This is a reversal of Polaroid policy of some years ago, when the firm had a B.S. equivalency program affiliated with Northeastern University. After an investment of $300,000 and enrollments of about 70 employees over a three year period, the end result was one graduate, a program duplicative with others, and disasterous costs for Polaroid and its personnel.

Because of this experience, an unresponsive academic community, and a high commitment to socially responsible objectives, Polaroid issued a White Paper in May 1971 declaring that it was dedicated to the teaching of the basic educational survival skills as a matter of policy and would use whatever resources were necessary to achieve this goal. Implementation of this education policy as part of an overall corporate policy of social responsibility has brought Polaroid favorable notices in the press, awards for "business citizenship", and genuine appreciation among Boston area minorities. Both the Honeywell and Polaroid successes in education are good examples for Divisions of Continuing Education to consider.

Traditional Higher Education and Employer-Group Interest in the MOU

Employer-group "connections" with colleges and universities are many and varied, as suggested by these examples and in the accompanying tables. In most cases these relations are long-standing and employer educators' regard for them range from "satisfactory" to "highly productive". As a rule, however, employers and their education and training staffs are critical of higher education's understanding of employers' educational needs and the colleges' ability to respond sympathetically and effectively to employer and employee educational requirements. This assessment seemed, in most cases, well-founded and based on case histories fully supportive of such a view., and true even of those employer groups which have established good relations with a college or university continuing education division. Such relations are the exception rather than the rule and appear tenuous at times

Employer-group criticism runs the gamut from the inability of the theoretically oriented "academic mind" to understand alternative ways of learning to nuts and bolts issues of program control and support. Some of the industrial firms noted that often science and technical departments in colleges and universities are "years behind" industry both in research and practical developments and in the educational expertise to carry on effective teaching in certain areas. Other employer educators noted an "exploitative attitude" on the part of some colleges and some faculty members. These colleges seem more interested in increasing income from the sources of outside funding represented by the employers than they are in offering innovative and high quality courses. Faculty members were reported to be of not the highest calibre or/and interested in teaching in an employer program primarily for extra moonlighting dollars. These are key reasons why employer groups utilize both "in house" staff resources and outside "special arrangements." With such arrangements, employers can tailor education to their own needs at costs far lower than through the colleges and guarantee measurable, if not predictable, outcomes. The cost benefits to employer and employee alike are great.

Because of this experience, four of the eight employer educators interviewed responded unenthusiastically to the question, "Would you be interested in seeing your program become 'academically accredited'"? The concern with academic accreditation and certification, as such, was viewed as one of the least attractive alternative futures for employer education because of the presumed necessity to affiliate with a traditional college or university. Two of the four, however, responded favorably to the possibility that their own program might apply for and receive accreditation, thus sidestepping predictable difficulties with the the colleges, and even more enthusiastically to the possibilities afforded by the Massachusetts Open University. The other two employer groups were not responsive to possible accreditation of their own program or to an MOU external degree option, at least for the present.

The remaining four employer-group educators responded favorably not only to the possibility of their own accreditation but to the entire nontraditional thrust of postsecondary continuing and part-time education. They were knowledgeable about Empire State College and its pioneer programs in employer education. They had followed the "open college" pilot programs underway in Massachusetts during the Spring of 1973. They were aware of the development of the MOU and were supportive of its rapid implementation. Thomas F. McLaughlin, Jr., Educational Director and Secretary of the Boston Chapter, AIB, concluded his 1971-72 Annual Report with the comment:

> As we look to the future, we see...the 'Open University' concept of education, which...is presently under study in Massachusetts and could have an important impact on the educational direction of the American Institute of Banking at Boston.
>
> It would appear that our program is ideally suited to be incorporated as part of this significant educational development.
>
> It would provide for the creation of 'an education bank' where students would store their training, education, as well as job experience--all to be incorporated into some form of a degree granting process.*

In the spring and summer of 1973 such views were common among leading employer group educators.

---

* Annual Report, 1971-1972, 63rd School Year. Boston Chapter, Inc., American Institute of Banking. Pp 21-22.

II.L.1. Table on Employer Connections with Continuing and Part-time Education Programs in Massachusetts Colleges and Universities

Introduction

The following regional tables show some of the continuing and part-time education programs existing on a cooperative basis between employer groups and postsecondary educational institutions. These charts are far from comprehensive and are only suggestive of the number and range of such programs throughout the State. The data were obtained from institutional Data Formats and employer-group publications and interviews. Had employer connections been a major focus of this study, and a major effort made to collect such information, the more comprehensive results would have confirmed what is suggested here - that the educational and training programs actually undertaken by colleges and universities and employer groups are far more extensive and comprehensive than is generally recognized, and of crucial importance to understanding developments in career and adult educational activities over this past five years.

EMPLOYER CONNECTIONS WITH CONTINUING EDUCATION AND PART-TIME PROGRAMS IN MASSACHUSETTS COLLEGES AND UNIVERSITIES

BEST COPY AVAILABLE

WESTERN REGION

INSTITUTION	EMPLOYER	PROGRAM DESCRIPTION	YEAR STARTED	#FALL, 1972 ENROLLMENTS	DEGREE?
Holyoke C.C.	Grtr. Holyoke C. of C.	Continuing program in business education	1973	NR	
	Acme Chain Co.	Supervisory seminar	1972	NR	
U./Mass.-Amherst	General Electric Corp.	Pittsfield M.B.A./M.S. in management allows p-t study to GE employees	1959	35	M.B.A./M.S.
	Springfield Action Commission, Inc.	Career opportunity program	1971	10	B.A.
	American College of Nursing Home Administration	Short course to train administrators	1971	NR	
	NE Society of Newspaper editors	Training for journalists	1971	19	
	(State Purchasing Agents Seminar)	Trains agents	1972	60	
(Political Science Dept.)	Commonwealth of Mass./ Bureau of Personnel/ Employee Training Section	Administrative Intern Program	1969	NR	
(Institute for Governmental Services)	Commonwealth of Mass./ Bureau of Personnel/ Employee Training Section	Intergovernmental Personnel Act (IPA) Program. Offers statewide training opportunities to city employees in 351 Mass. towns & cities. 7 courses, 9 conferences.	1970	5,507	
Greenfield C.C.	Union Twist Drill	Classes in industrial technology	NR	15	

CENTRAL REGION

Quinsigamond C.C.	Control Manufacturers Employers Assoc.	Industrial management	1969	110	(provides up to 18 credits)
	State Mutual Life Insurance Co.	In-service courses	1972	45	planned: 2 yr. degree in business admin.
Worcester Polytechnical Institute	Honeywell Corp. (Wellesley)	Courses in computer sciences	1972	90	
	American Optical (Framingham)		NR	NR	
	Digital Equip. Corp. (Maynard)				
	Sanders Associates (Nashua, N.H.)				
Framingham State C.	Municipal Supervisory Employee Seminar)	Trains supervisors in town gov't	1972	15	
Worcester Jr. C.	Honeywell Corp.	Variety of reimbursed courses	1959	150	A.A. in business admin. A.E. in engineering Management training certificate
Fitchburg S.C.	Raytheon Co./Missile Systems Division, Bedford Laboratories	Computer Science Electrical Engineering Engineering Management	1963 1963 1963	500	B.S. in Industrial Sci.
		Computer Science (software)	begin Sept.'73		M.S.

BEST COPY AVAILABLE

EMPLOYER CONNECTIONS WITH CONTINUING EDUCATION AND PART-TIME PROGRAMS IN MASSACHUSETTS COLLEGES AND UNIVERSITIES

NORTHEAST REGION

INSTITUTION	EMPLOYER	PROGRAM DESCRIPTION	YEAR STARTED	#FALL, 1972 ENROLLMENTS	DEGREE?
Middlesex C.C.	Raytheon Company MSD/Bedford Laboratories	Secretarial program	1971	40	A.A.
Lowell Tech. Inst.	Western Electric No. Andover	Employer training	NR	59	
	Raytheon Company/ MSD/BL	Seven graduate subjects in computer programming and biomedical engineering	NA	72	
	Commonwealth of Mass./ Bureau of Personnel/ Employee Training Section	Civil engineering A.A. program taking 5 years to complete. Offered in Lowell/ Boston, Worcester, New Bedford, Pittsfield, Springfield	1960	380	A.S.

SOUTHEAST REGION

INSTITUTION	EMPLOYER	PROGRAM DESCRIPTION	YEAR STARTED	#FALL, 1972 ENROLLMENTS	DEGREE?
Dean Junior College	Franklin Industrial Development Comm. Franklin C. of C. Small business admin.	Community Economic Development Workshop	1972	70	

BEST COPY AVAILABLE

EMPLOYER CONNECTIONS WITH CONTINUING EDUCATION AND PART-TIME PROGRAMS IN MASSACHUSETTS COLLEGES AND UNIVERSITIES

BOSTON REGION

INSTITUTION	EMPLOYER	PROGRAM DESCRIPTION	YEAR STARTED	#FALL, 1972 ENROLLMENTS	DEGREE?
Suffolk University	Western Electric/ No. Andover		NR	80	M.B.A./M.S.
	American Inst. of Banking, Boston Chapter, Clients	Joint Evening bachelor, associate and master's program in finance and banking	1972	37 students from 16 banks enrolled in B.A./M.A. programs	A.A.,B.A., M.A.
Mt. Ida Jr. College	Data Utilities of North America	Train data processors	1971	NR	
Northeastern U. (Lincoln College)	Wiggins Airways, Inc.	Provide aviation Training	NR	NR	A.S.
Babson College	Bank Management Inst.	3 seminars on educational statistics		112 (Spg'72)	
Hickox Secretarial School	AIB, Boston Chapter, Clients	Secretarial skills training	1968	205	
	Mass. Employee Training section	Secretarial skills training	1971	200	
Lowell Tech. Inst.	Commonwealth of Mass. /Bureau of Personnel Employee Training Section	3 year degree program	1964	601	B.S. in engineering technology
	Commonwealth of Mass. /Bureau of Personnel/ Employee Training Section	Accounting (4 year evening program)	1969	60	A.A. in business admin. w/major in accounting
		Data Processing (4 year evening program	1968	90	A.A. in business admin. w/major in data proc.
Mass. Bay C.C. (Secretarial Science Dept.)	Commonwealth of Mass./ Bureau of Personnel/ Employee Training Section	Executive Secretarial Training Program	1970	200-300	nondegree workshop
Selected Mass. C.C.'s	Commonwealth of Mass./ Bureau of Personnel/ Employee Training Section	2 year degree program to upgrade LPN employees of state hospitals	1968	70	A.S. in nursing
Boston College (Bureau of Public Affairs)	Commonwealth of Mass./ Bureau of Personnel/ Employee Training Section	2 week training program in real estate appraisal for Dept. of Public Works employees	1969	25	
Northeastern University (School of Respiratory therapy)	Massachusetts General Hospital	One year formal training for certified Respiratory Therapy Technicians	March 1971	14	Certificate
	Massachusetts General Hospital	Five year undergraduate cooperative curriculum in both medical and non-medical areas. Similar cooperative plans coordinated through Northeastern's Professional Schools			

BEST COPY AVAILABLE

M. Nontraditional Study

DISCUSSION II-629
Antecedents of the Nontraditional Study Movement in Massachusetts. II-629
The New Nontraditional Study Movement II-630
The University Without Walls. II-632
UWW "Spin-Offs" II-633
"Open College" Pilot Programs in Massachusetts. . . II-637
The Proposed MOU. II-638

DISCUSSION OF NONTRADITIONAL STUDY

Antecedents of the Nontraditional Study Movement in Massachusetts

Nontraditional study (defined in the proposal for a Massachusetts Open University as "any mode of learning other than full-time, day session, classroom instruction"[1]) in Massachusetts has received a great deal of attention in the last couple of years and it is therefore easy to view current innovations as being unique and unprecedented. These include experiential learning, media experiments, modes of home and independent study, calendar and schedule changes and others (e.g., the British Open University model is nontraditional in its use of teaching teams, media, home study, learning centers, etc. and the University Without Walls involves experiential learning formats). As significant as these major efforts are, to see them and the spin-offs stemming from them in Massachusetts as totally new is not quite correct. Such a view neglects the many highly significant innovations over the last couple of decades. It is worth reflecting therefore on the antecedents of current innovations.

In this State and nationally, continuing education has always had a certain "nontraditional" flair in its admissions and matriculation policies, in its responsiveness to consumer demand and in its use of nontraditional faculty on a contract basis. There have been some notable examples in other states of "nontraditional" bachelor's degree programs for adults in liberal studies, general studies, and independent studies.

A few selected examples from Massachusetts illustrate the continuous process of innovations along nontraditional lines in the continuing and part-time education system in Massachusetts.

Northeastern University and Western New England College have long accorded part-time self-paced (day and evening) learning an equal status to the traditional full-time-day model, as have many other institutions to a lesser degree. Further, both institutions have used outside faculty as well as traditional faculty. Proprietary institutions have similarly been innovative in recruitment and use of faculty and in flexibly scheduling programs to facilitate part-time study while working and/or time-shortened program options.

The integration of work experience with formal study has occurred quite naturally in all continuing education programs for those part-time students whose study is related to their employment.

Insofar as introducing new courses and programs of study are concerned, proprietary schools, Boston University and Northeastern University have shown great innovativeness over the last decade, usually being the first institutions in the Boston area to introduce new courses and programs of part-time study later duplicated at other institutions (see Educational Exchange Data (in Section II.N.).

CLEP and other credit by examination options have been used in several continuing education programs, as have (more recently) credit for life experience.

Correspondence based independent study and media (TV) instruction have been employed by the Mass. Department of Education, particularly prior to 1965 when all responsibility for postsecondary instruction of this kind was removed from the Department.

Branch campuses to provide education service to underserved clientele in several locations were opened by Northeastern University and their Adult Day Classes Program offered to serve women with children at school.

Special off-campus joint cooperative programs have developed, among the most notable being the Fitchburg State College-Raytheon Company Program.

These few examples are not exhaustive but serve to illustrate that nontraditional approaches to higher education are not new to Massachusetts. What is new is the increased recognition of such approaches as legitimate by the traditional higher education (day college) world. The issue is one of attitude change--of increased openness to nontraditional modes of study. This is true nationally, even more so than within the Commonwealth.

The New Nontraditional Study Movement

Ideologically, two rather different and not entirely complementary groups initially took up the cause of nontraditional education. One group--the "planners"--was the movement's "right wing", so to speak. Planners saw alternative higher education from the perspective of public policy, accountability, systems management, cost benefits, and efficient allocation of resources. Professional educators, education researchers and--increasingly--college and university administrators were also seeking alternatives to wasteful, duplicative, and counterproductive programs. Essentially they sought ones which could demonstrably produce better learning for more people at lower costs. The plethora of education commissions over the past half decade provides perhaps the best examples of this perspective. The findings and recommendations of the Carnegie and Gould Commissions clearly favor change in the interests of a stronger national system of higher education (Carnegie) or a central role for nontraditional studies within postsecondary education (Gould). Specific reforms, measured change, and practical innovations were the perceived means of correcting flaws in a system out of step with the demands of the 1970's.

Another group--the "doers"--was the movement's "left wing", as it were. Doers at the program implementation level emphasized experiential learning (as opposed to cognitive learning), and a counter-educational system was proposed consisting of self-selection in the admissions process, learning contracts establishing the plan of studies, off-campus learning resources (including media), self-pacing in the degree time-frame, and a variety of non-graded evaluation techniques. Many versions of such programs had appeared on small private college campuses by 1970-1971 as experimental or pilot projects.[2]

By the Fall of 1972, there were clear signs that the alternative education "movement" was maturing. The more idealistic and romantic individualists of the "left" had found value in what "planners" were seeking to do by providing nontraditional studies in traditional higher education. This appreciation was quickened by education's changed status within the society, by new federal and state policies affecting colleges and universities, by the sudden "discovery" and recognition of occupational and career education, and of proprietary institutions and vocational technical training institutes, as co-equal partners in the postsecondary educational enterprise.

Nontraditional education, with its already demonstrated appeal to new clienteles and possibilities for flexibility in the time/space/credit-preference continuum, afforded planners with necessary catalysts for gradual but significant change. It is now possible to distinguish meaningfully among not only different kinds of operational programs but different kinds of external degrees as well. There had long been in existence "extension degrees," open to adults during evening hours, and special "adult degree" programs serving some special function and clientele. The newer "external degrees," however, might encompass extension degrees for adults but whose learning was taking place largely off campus (e.g., Empire State College). Special adult degrees, such as University College/Syracuse University, might be pursued through independent study. Degrees could be awarded exclusively through successful passing of proficiency examinations, as in the case of the New York Regents' External Degree Program. Evaluation, once freed from the process constraints of grades and credits, is now being viewed more properly in terms of criteria and effective means of applying them in appropriate situations, criteria such as: comprehension of a specific body of knowledge, aquisition of specified skills, demonstrable intellectual and personal development. A mix of options is emerging as the mode of nontraditional studies.[3]

1972-73 has seen the emergence of many new efforts focused on nontraditional learning formats in Massachusetts. College III of U./Mass. - Boston, the Worcester Consortium External Degree Proposal, and the Proposal for a Massachusetts Open University are but three of many examples. Nontraditional study, once represented by innovative efforts in continuing education programs have suddenly become a focus of reform in traditional college programs.

Until as recently as one year ago, Massachusetts had lagged behind other large states in planning and implementing statewide systems of nontraditional studies and in encouraging and supporting the creation of individual pioneering, precedent-setting single programs. Other states had taken the lead in creating model statewide systems (such as New York, with its Regents/ External Degree Program and the Empire State College), innovative segmental programs (such as Illinois' Board of Governors Degree Program or Vermont's Community College Program), or single public institutions with a special emphasis upon nontraditional learning (such as Minnesota Metropolitan State

College, University of Wisconsin/Green Bay, or Evergreen State College in Washington.)

Decline of traditional patterns of higher education, however, coupled with demands for new clienteles, new modes of learning, new delivery systems, and new sources of funding, are resulting in discernibly new patterns of postsecondary education in Massachusetts. The conjunction of existing programs of continuing and part-time postsecondary education with newer nontraditional formats might well provide the cutting edge of higher education for the remainder of the 1970's.

As a national educational phenomenon, many of the newer nontraditional educational programs are a reaction to the problems educators faced in the late 1960's. These were the problems created by an exclusive reliance upon campus-bound, four-year (or two-year) major degree programs centering around a standard academic discipline. The student's learning experience was structured by sequential required courses, each of which generated credits and grades, the sum of which netted the student a degree. Few options existed within this process. For all practical purposes, no alternative system was available. Traditional higher education's chief failure was in this sense a learning failure. It was "the 'clunk!' in the classroom," as Charles Lyons puts it,[4] which inspired the alternative education movement and gave rise to the creation of nontraditional studies.

And so, the change in the status and impetus of nontraditional study has come with full force. How the change has come about can be seen from examining the origin and impact of the most well-known and visible of the experiential genre--the 12 original program units of the University Without Walls (sponsored by the Union of Experimenting Colleges and Universities with seed money supplied by the U.S. Office of Education and the Ford Foundation). In the sections which follow the UWW history will serve to illustrate the emergence of montraditional study as a point of emphasis in Massachusetts higher education.

The University Without Walls (UWW)

UWW at its inception was a quite radical plan of study to be implemented through a loose consortia of institutions committed to change. By 1970-71, "UWW" was an idea whose time had come. The proposal document itself was inspired by a series of three previous summer conferences of faculty from UECU institutions with the avowed purpose of improving college teaching (Project Changeover). These 50 faculty, and the UECU staff who later wrote the plan, no doubt represented a fair cross-section of the 18 UECU institutions; the proposal was both utopian and feasible, thus making it a truly radical proposition.

The transition from concept to reality was not easily made, however. From the beginning, UECU had difficulty in coordinating the efforts of the 12 programs, organizing its own activities to maximum effect, and securing initial or follow-up funding. Programs varied considerably in relation to the UWW model outlined in the proposal. Thus in September 1972, one year after formal implementation, a few programs had enrollments of over 100, developed and approved guidelines, and graduated their first students. A few other programs had barely begun. The majority of UWW programs fell between these two extremes, with small numbers of faculty and students on board but with most of the serious educational and administrative problems as yet unsolved.

In the Spring of 1972, UECU had issued A First Report[5] stressing the strengths of the programs, their several outstanding successes, current planning efforts, and the degree to which non-UECU colleges, state and federal agencies, and foundations were interested in the UWW experiment. The report did not deal with the programs' operational weaknesses, such as the general lack of adequate student assessment or program evaluation criteria and methods, but it did convey the belief that problems would be solved through growth, appropriate research, and further funding. A subsequent article appearing in the education press written by a UWW director raising some of the hard, critical questions about the UWW program was loudly decried in many UWW quarters.[6]

During 1972-73, UWW's second full year of operation, UECU resolved some of its organizational and operational difficulties. Evaluation and assessment began to be undertaken as serious professional obligations. Some programs developed a remarkable viability. The UWW unit within University College at the University of Minnesota and the Westminster College program for minority students at Berkeley, California, are two such examples. The hoped-for growth had occurred, with over 33 institutional affiliations reported by Spring 1973, although a saturation point may have been reached in the number of colleges and universities requiring UECU assistance and coordination. Another kind of growth, and a possible UECU/UWW shift in program emphasis, was assured by the award of a $165,000 grant to UECU by the Fund for the Improvement of Postsecondary Education for 1973-74. The grant was to fund six regional sites to bring the "UWW option" to high school students beyond the 10th grade.

This particular thrust for UWW, while not altogether a new commitment, will certainly be its major undertaking for the near future. It coincides with recommendations made in one of the Carnegie Commission's recent special reports, Continuity and Discontinuity: Higher Education and the Schools, in which four-year institutions and senior high schools are urged to pool curricular resources and develop Middle College programs. The major incentive for the colleges, the Commission stressed, was the declining trend of freshman enrollments. As noted earlier, self-preservation has become a drive toward innovation and reform.

UWW "Spin-Offs"

The national scope of the alternative higher education movement, with UWW as its advance guard, is important because of the direct and indirect spin-offs within the Commonwealth. In a general way, "nontraditional" academic options are now found in the regular, full-time programs of many colleges and universities across the Commonwealth. These range from independent study and internship-for-credit opportunities (fairly modest options) through entire degree programs and collegiate institutions with nontraditional missions.

Undergraduates at Harvard, Radcliffe, Boston University, Simmons, Wellesley, and the University of Massachusetts, can now avail themselves of the Shared Experience Program providing noncredit work experience in Boston-area firms, a recent option developed by Harvard University's Office of Career Planning, and Off-Campus Learning in conjunction with Western Electric. In 1972-73, more than 150 students were involved from Harvard and Radcliffe. Sponsors are careful to note, however, that the program is limited to noncredit, nonpaid full-time students who wish "some experience in the real world." The noncredit aspect appears to imply a judgement about the value of the learning obtained in the experiential setting, a judgement which runs counter to the basic premise of nontraditional modes of postsecondary education, namely, that equivalent learning can and does take place in settings other than the traditional college classroom.

Other academic programs at very different kinds of institutions also demonstrate the range of alternative education in Massachusetts. Two graduate programs offer nontraditional master's degrees. The Institute of Open Education located at Newton College (but lately administered by the Antioch Graduate School of Education) grants the M.Ed. through a one-year work-learn arrangement. The Cambridge-Goddard Graduate School for Social Change offers a number of programs leading to an M.A. organized around a theme of radical social and political action, including a Feminist Studies Program. Both the Institute and Cambridge-Goddard are interesting variants of the Antioch mode of alternative education.

Another kind of college entirely, one focusing exclusively on early admissions for high-achieving high school students is Simon's Rock College in Great Barrington. While embracing the middle college concept, it is traditional in stressing cognitive learning in the academic disciplines. Serving a different clientele, University Year for Action's two Massachusetts components, at U./Mass.-Amherst and U./Mass.-Boston, provide twelve-month work-learn programs for local students in community-based service agencies. Both campuses had 110 students placed in 23 Boston area agencies during 1972-73. At the national level, UYA is one of the UWW's most important spin-offs.

The direct impact of UWW upon Massachusetts higher education has been the two UWW programs existing in the state since fall 1971. Shaw University, a predominantly Black institution in Raleigh, North Carolina, began a UWW program in Roxbury in January 1971. Shaw's UWW program in Boston/Roxbury has enjoyed wide and favorable publicity as a model educational program for urban minorities, and was the recipient of a $50,000 USOE grant to develop just such a model. The unit is incorporated in Massachusetts as "University Without Walls of Boston," thus avoiding possible legal complications of an out-of-state agency offering educational programs within the Commonwealth and anticipating possible accreditation difficulties. For the present, because of its ties both with Shaw and UECU, "UWW/Boston" may offer both a Shaw and a UECU/UWW B.A. Shaw regards the unit as a branch campus focusing on urban education and plans similar branches in Detroit and Chicago. Greater autonomy for the Boston unit, or its future independence as an institute or college, is discouraged by the Raleigh administration. Such continuing differences over governance, program, budget, and tuition illustrate the general problems branch campus innovative programs can be expected to encounter in relations with parent institutions. The Shaw connection makes "UWW/Boston" atypical of the majority of UWW programs, but very similar situations also exist for the Westminster College units in Oklahoma and California and the Antioch College programs located at a half-dozen sites around the country.

Boston/Roxbury UWW is fairly representative of innovating urban institutions attempting "relevant learning" for the disadvantaged minority student, and at the same time retaining basic academic credibility as an educational operation. Like most such programs (e.g., the College for Human Services in New York City), "UWW/Boston" has not resolved such educational questions as the need for instruction in basic academic skills, the need for work-learn opportunities or classroom vs. independent study models of learning for the disadvantaged student.[7]

UWW at the School of Education, U./Mass.-Amherst, is the other UWW unit within the state. It affords an excellent illustration of the strengths and weaknesses of a UWW. "UWW/Amherst" commands the full and enthusiastic support of the School of Education; indeed, from the outside it is difficult to differentiate it from other "open" curricula of the School. The Amherst program has provided some of the most useful and influential learning models and tools in alternative education. The "Training Skills Guide," while not original in a conceptual sense, blends various strands of "input" from the counterculture, instructional technology, and the human potential and encounter movements into an excellent working document for entering UWW students (and their advisors) faced with the question, "How do I go about learning on my own?"

"UWW/Amherst" has been most effective in developing its own visibility and in translating general concepts into working documents, such as the "Learning Skills Guide." It has been less able to communicate hard "facts and figures" about the program to the outside world. These data are needed to answer such questions as: how many students are involved in what kind of "learning contracts," under what conditions, for what lengths of time, with what final results and at what costs to both student and institution? Until such evaluations are conducted and made available to other alternative educators, the ground between hypothetical study plans and successful study options will remain unexplored and unknown.

Even if all the results of nontraditional studies never do come in, it can be argued that they are still worth undertaking and supporting, by a major university whose chief mission may always be along traditional lines. In defending his campus's innovative academic programs from critics who see nontraditional studies as "tangential to the University, not really a part of the featured event, but simply an exotic sideshow," Chancellor Randolph W. Bromery recently argued their necessity to the university's existence:

> Without the ferment and new directions they explore, much of our intellectual life would atrophy, our teaching become stale, and our ability to respond to new opportunities and public needs become increasingly weak. . . .Much of the life of this university will probably always lie in the intellectual explorations of our faculty and students--in offices, classrooms, laboratories--but the degree to which that effort is worthwhile will greatly depend on our ability to try new approaches, respond to new public needs, explore alternative modes of learning, and raise new questions about how we conduct our historic enterprise.[8]

Another important impact of UWW in Massachusetts is found in a proposal for the Massachusetts Open University submitted to the Board of Higher Education by the Lieutenant Governor's Interim Planning Group in February 1973.[9] The proposal bears many resemblances to the original UECU/UWW proposal of 1969. It is not accidental that the MOU proposal was prepared by a Task Force from U./Mass.-Amherst or that UWW rather than the British Open University is its inspirational forbearer.[10]

The Board of Higher Education had studied the possibilities of an open university on the British model throughout 1971. The attractions of the "Open" in Britain were manifest for statewide planners. It was a national alternative system of higher education, adequately planned and fully funded, to provide competency-based instruction through local education centers, instructional media and correspondence to clientele formerly excluded and underserved by the universities. Initial observations and first-year results of the British "Open" appeared highly favorable except for the fact that students attracted were from higher socioeconomic and educational groups than had been hoped for. Foundation courses in several fields have been developed which are excellent models of multi-method and multi-media approaches.

Open University materials are franchized in the United States through Harper & Row Publishers and, by spring 1972, were available for purchase by institutions and individuals. The materials consist of paperback course books, BBC-produced films, and audio-tape cassettes. Initial previews by American educators, however, were mixed insofar as the suitability of the materials for American adults in continuing and career education or for nontraditional students was concerned. The uniformly high quality of subject matter and presentation could not be faulted, but applicability of traditional university courses presented in English accents (and, moreover, using English examples and illustrations) to most existing and potential nontraditional American clienteles was questioned. Some educators urged further search for more original materials closer to the direct educational and career needs of the new students.

"Open College" Pilot Programs in Massachusetts

If by September 1972, Massachusetts public institutions were somewhat overdue in beginning a major statewide program of alternative education, they nonetheless had the advantage of learning from others' mistakes and successes. Until it could be decided what kind of an "open university" the proposed Massachusetts Open University would be, the Massachusetts State College System launched a number of small "open college" pilot programs at several of the individual state college campuses.

Salem State College was the first to begin, in September 1972, with 40 students, six faculty from five departments, and a budget of $18,000. Specifically patterned on the British Open University model and using OU materials, the program offered students an integrated course of study in the humanities. The 40 students were each assigned a faculty advisor, required to attend 36 once-a-week TV and radio tape sessions, or carry out a plan of learning through "instruction" or independent study. Ninety percent chose the second option.

The Bridgewater State College program began in February 1973 for operations through August 1972. Funded at $50,000, the program enrolled 50 students in two 15 semester hour sequences of social science (contemporary American civilization) and behavioral science (field internships). The social science sequence was structured with lectures, courses, and grades. The behavioral science sequence used a seminar/ independent study format employing video tape technology.

Fitchburg State College identified four disciplinary areas of general education--communications, mathematics, physics, and psychology--and offered courses for a total of 30 students in the undergraduate day program, vocational education, and the innovative continuing education program with the Raytheon Company described earlier and for another 20 students. Using a variety of methods, Fitchburg experimented with adapting traditional liberal arts subjects to a mix of clienteles both on and off campus by retraining selected faculty. Cost effectiveness is a significant concern in the Fitchburg experiment.

Framingham State College began the most ambitious of the "open college" programs in January 1973. With $35,000 and space rented at the Marist College and Seminary at Framingham Center, the Division of Continuing Education and Special Programs began a nontraditional part-time program for 50 students which expects to grant the B.A. in Liberal Studies as an external degree. Designed closer to the UWW model than to the British Open University model in terms of its goals and purposes, the Liberal Studies curricula prescribes 76 hours of broad requirements, comprehensive examinations, and resident requirements. It limits to 20 hours the amounts of life experience which can be accrued toward the degree, but a wide variety of options are open for earning a degree. Students include 20 women and 30 men with an average age of 42.8 years (and a range of 21 to 75) and an average of 34 hours of college already completed. The Framingham program has received a $36,000 grant from the Fund for the Improvement of Postsecondary Education to develop its assessment techniques in 1973-74.

The SCS "open college" pilot program is very modest in both its objectives and accomplishments when weighed against either the UWW or British Open University model. The Fitchburg and Framingham programs specifically seek to match diverse "nontraditional" student clienteles to various learning situations with flexible programming of basic traditional liberal arts curricula. They also add credit for life experience and off campus teaching and learning. The Salem and Bridgewater programs are testing less dramatic changes in the traditional college format and clientele.

When planning resources are scarce and start-up dates are as important as educational quality considerations, innovative administration is essential. Many continuing education units of institutions across Massachusetts can provide such innovative leadership more effectively than regular academic administrative departments because of the "nontraditional" nature historically of continuing education. This is certainly borne out in the case of the current pilot programs. The State College System experience with the "open colleges" demonstrates how existing continuing education programs can in a short time begin a nontraditional study option. The object lesson is exceedingly important for future faculty development and curricular planning for new programs and the proposed Massachusetts Open University. More of a comprehensive and systematic nature will be known about student learning in the four pilots when an evaluation is completed and published in the fall of 1973.

The Proposed MOU

By early 1973 the Interim Planning Group had a wealth of studies, systems, and models in this state and others on which to draw to design an acceptable proposal. The result is a realistic plan for a statewide nontraditional studies network which can be quickly mounted using existing resources to produce measurable results from clearly articulated objectives. The Governor's Executive Order of 18 April 1973 establishing a task force of professional educators charged this group with developing plans for beginning MOU operations in January 1974.

In general, the MOU's purpose is to bring educational opportunity to new populations using a wide variety of time, place, subject, and style options. The new populations will include women, disadvantaged and minority groups, prisoners, working adults, older persons and returning veterans. Programs will be primarily nonresidential in nature and will be undertaken collaboratively with all educational institutions within the Commonwealth. A variety of external undergraduate degrees may result. Upon admission, proficiency examinations will determine how far along the student is in qualifying for a degree. Traditional course work may be undertaken directly under MOU auspices through continuing

BEST COPY AVAILABLE

education centers or indirectly through any educational institution offering courses. Nontraditional studies will be actively encouraged using tutorials, field experience, work-study, independent and home study, internships, and programmed learning. It is proposed that the "geographical imperative" of area-specific educational needs--ideally no student should be further than a 45-minute commute from an MOU learning center--will be met through coordinated efforts at the continuing education program facilities of the public colleges and universities. A crucial aspect of the MOU can be its cost benefits. This necessitates full utilization of the existing continuing education network.

FOOTNOTES

1. Thomas Clark, Edward Harris and Charlotte Rahaim, "Massachusetts Open University", A Proposal Submitted to the Massachusetts Board of Higher Education, 1973.
2. Reviewed in A Study of the Potential and Capacity for Innovation in American Higher Education and of Federal Policy Possibilities, George Nofli, et. al., University Consultants, Inc, 1971.
3. One of the most useful handbooks on current trends in nontraditional education is: Michael Marien, Beyond the Carnegie Commission: A Study Policy Guide to Space/Time/Credit - Preference Higher Learning (Syracuse: Educational Policy Research Center/Syracuse University Research Corporation, August 1972).
4. Peter Meyer and Sherry L. Petry, "Experimental Education: One Point of View," in Off-Campus Education: An Inquiry (Southern Regional Education Board, 1972), p. 22.
5. The University Without Walls: A First Report. Yellow Springs: Union of Experimenting Colleges and Universities, February 1972.
6. Herbert London, "University Without Walls: Reform or Rip-Off?" Saturday Review/Education (16 September 1972), pp. 62-65.
7. Prentis M. Moore (Project Director). Research and Development Report: Shaw University's University Without Walls of Boston for Academic Year 1972-73 (Roxbury, Massachusetts: May 1973). This collection of documents falls short of an evaluation or as a "model" urban education program for the disadvantaged. It is nonetheless highly informative.
8. Randolph W. Bromery, "Sideshow or Main Event?" Options, University of Massachusetts, Amherst, March 1973 , p. 2.
9. Clark, op. cit.
10. The three essential reports are: Jerrold R. Zacharias, "The Open University: A Preliminary Report" (September 1971); James E. Allen, Jr., "An Open University/External Degree Program for Massachusetts" (October 1971); and Report of the President's Committee on the Future University of Massachusetts (Boston: University of Massachusetts, December 1971).

BEST COPY AVAILABLE

N. Additional Information on Selected Aspects of Continuing Education

1. Analysis of Educational Exchange Trend Data on Greater Boston (1962-1972) II-643

2. Boston Model Cities Higher Education Program. II-655

BEST COPY AVAILABLE

II.N.1. Analysis of Educational Exchange Trend Data on Greater Boston (1962-1972)

Source material for an analytical look back at the last ten years of continuing and part-time education is rare. One of the few available resources is a publication of the non-profit Educational Exchange, Educational Opportunities of Greater Boston for Adults. Published annually since 1922, this catalogue provides a compilation of course offerings and schools that can serve as a useful record of trends in adult education.

For purposes of detailed analysis, however, the book's format imposes several limitations. The Educational Exchange is selective in the preparation of its catalogue, a factor which does not allow documentation of schools and programs which do not satisfy its standards. As an annual publication, the catalogue cannot keep pace with late course changes and midyear variations.

Clearly the Educational Exchange Catalogue is not, nor was it intended to be a comprehensive documentation of adult education in Greater Boston. Its function is to serve as a guide to the available opportunities, from the standpoint of a potential adult education client. In this sense, an examination of the catalogues of the past ten years offers data on what must be the perceived opportunities for education of the adults whom it serves. This information is important, since an unperceived opportunity is, in effect, no opportunity at all. Thus, while no hard statistical conclusions can be drawn, the Educational Exchange information provides a good sense of the trends in adult education in the Boston area since 1962.

A comparison of the schools listed in the catalogue by type reveals a pattern of little change among which public and private institutions offer continuing education. (The opening of three new public campuses in 1973-74 will be the major change of the decade in terms of number of providers.) For proprietary schools, however, the ten-year trend is one of fluctuation and turnover. Over 80% of all school closings since 1963, were proprietaries. Of those that opened since 1963, almost a third were no longer listing courses in the catalogue by 1972.

Of primary significance is the fact that the total number of proprietary schools has been slowly, but steadily, increasing. The implication is that the turnover rate is high, but the demand for courses is increasing. This factor is probably indicative of the volatile nature of the education business, with its passing fancies often catered to by aggressive entrepreneurs. That is not to say that all proprietary institutions exhibit these tendencies. Some of the most consistent schools listed in the catalogue have been proprietaries, particularly in the fields of business and commerce.

Indicative of the volatility that often exists among proprietary schools is the case of computer technology training. A rapid expansion of courses in this field in the mid 1960's--led by the proprietary schools and large private universities (Northeastern and Boston University)--brought about a saturation of the market. Many of the new proprietaries who had been among the first to introduce the new subject area were forced to close when the demand began to wane in 1970, while the others were able to either absorb their losses or capture a sufficient share of the shrinking market.

A second major conclusion can be drawn regarding the issue of innovation. The general pattern in adult education (as reported in the Educational Exchange catalogue and subject, as we have seen, to an understatement of changes) has been consistency. Inertia seems to be a governing law: once a course is offered, it generally remains in a school's course listing. In some instances, particularly in subjects covered by the social issues debated in the 1960's, the Educational Exchange data shows a significant degree of innovation. Topics such as ecology, urban problems, law enforcement, and women's workshops appeared and underwent substantial growth. The primary catalysts in this innovation were private institutions. The most influential of these has been Northeastern University, which has provided the principal impetus in the introduction and expansion of [illegible] programs in both academic and technological areas.

While expansion in these selected subjects has been significant, the situation in Greater Boston, from the standpoint of the adult seeking to choose among various educational opportunities, has not undergone substantial change. The Educational Exchange information indicates that, in most areas, the opportunities available for adults in 1962 were quite comparable to those ten years later.

Although the general picture of adult educational opportunities in Greater Boston, as shown by the Educational Exchange Catalogue, is one of minor change over the last 10 years, a few significant trends have emerged:

1) Fluctuation in the number of schools is determined by the proprietaries, which make up about 60% of all institutions. They account for 83% of all school closings, especially among new schools. The failure rate of new, non-proprietary schools (i.e. those schools that have opened since 1963 but that are not operating by 1972, excluding those that have reopened or transfered operations) is 0 out of 23. For proprietaries, the number is 28 out of 93.

2) In 1972, an increase in the public and private schools began to appear. This includes continuing education programs (like the ones at Curry College, Northeastern, and Bentley) and community colleges (like Middlesex). The result was an increase in the number of courses in almost every academic and engineering area. This came at a time when many of these subjects were levelling off after an initial period of growth spurred by Norhteastern's large course increases in the mid-1960's.

3) The last few years have seen a greater degree of innovation--mostly led by proprietaries and by Northeastern and Boston University, though later supported by the new continuing education-community college entrants. These have ranged in subject from ecology to computers to women's workshops. Despite this innovative trend, municipal adult education programs (Newton, Medford, Malden, Brookline, etc.) have had little action in these new areas.

4) Despite a high turnover rate among proprietary schools offering business oriented courses, the total number of courses has itself remained somewhat constant (or experienced a slight decline). On the other hand, the rapid overexpansion of computer (business automation) courses took its toll on the many proprietaries specializing in this area, leaving the schools with corporate ties (Control Data, Sylvania, Honeywell, ITT).

5) The single most important institution has been Northeastern, which has continually led in the expansion of courses, the initiation of new programs, and the elimination (or reduction) of certain subjects. Most of the mid-1960's increases (especially in academics and technology) can be attributed almost exclusively to Northeastern's expansion.

Limitations of the Data

This paper is an analysis of the data obtained from the catalogues of the Educational Exchange of Greater Boston, entitled "Educational Opportunities of Greater Boston for Adults." The period covered runs from 1963-64 through 1972-73, and includes information on schools and other institutions, course offerings, and special programs. Courses are divided into three broad categories: 1) commerce and finance; 2) engineering, technology and trades; and 3) academics (sciences, mathematics, and social sciences). The following categories are not covered by this paper: arts and crafts; physical education; reading; recreation; expression; homemaking and home economics; and languages and literature.

The first part of the paper deals with trends in institutions over the ten year period. Three types--public, private, and proprietary--have been identified for this purpose. The remainder of the paper studies the course offerings, by category, over the ten year span of the study. Special attention will be focused on new types of courses that have developed within this period, and on selected subtopics that show various aspects of development. Various special programs will be considered.

Limitations on this approach will be explained where appropriate. Several general caveats, however, are in order now. The study is only as accurate as the data compiled by the Educational Exchange, which admits to being both selective and conservative. Because all schools are investigated before they are listed in the catalogue, some have necessarily been excluded. The time lag between a school's opening and its inclusion in the catalogue is at least one year. Some schools that open and close within the one year "investigation" period are not included in the data. This factor tends to understate the turnover by an unknown factor. Once a school is accepted, however, instances in which it is removed from the catalogue are rare, if ever, during the period under study. The effect on course offering data is minimal, except in cases where new schools initiate new topics--these would not appear for at least one year. Established schools might appear to be leading a trend when the reverse might be the case.

Working within these limitations, the paper will accept catalogue information as it appears. In other words, an "opening" will be given as the year in which a school is first listed. The assumption in these cases must be borne in mind.

Schools and Institutions: 1963-1972

During the period studied, the number of schools offering part-time education in Greater Boston rose slowly and somewhat steadily, from 204 in 1963 to 232 in 1972 (see chart 1-1). The number of public institutions was quite stable, with 54 in 1963 and 55 in 1972. There were a total of 9 public school openings, and 8 closings (2 of which reopened). The major causes of any public school turnover were: 1) the elimination of several adult practical art classes (Braintree - 1968; Dover - 1968; Wellesley - 1970); 2) the closing of Quincy Evening School (1968) and Wellesley Adult Education (1970); 3) the opening or new listing of continuing studies programs at Mass. College of Art (1966), Boston Adult Basic Education Centers (1968), University of Massachusetts Cooperative Extension Service (1969), Needham Adult Education (1972), and Middlesex Community College (1972).

The private schools experienced a steady rise from 28 in 1963 to 35 in 1968, with several closings from 1968-1970 (Tufts University Evening Division - 1968; Grahm Junior College - 1969; and Emmanuel College - 1970). Two additional closings in 1972 (Lesley and Emerson Colleges, Extension Divisions) were offset by the opening of Bentley and Curry Colleges, Divisions of Continuing Education, and the reopening of Grahm Junior College.

While the proprietary institutions experienced a steady gain in numbers from 122 in 1963 to 143 in 1971, they also experienced the greatest degree of turnover. A total of 93 such schools opened during the ten year period, along with 73 closings. From a low of 12 turnovers (8 open; 4 close) in 1966, the number climbed to 24 (12 open; 12 close) in 1968, dropping steadily again to a low of 16 (10 open; 6 close) in 1971. The 1972 figure again rose, to an overall high of 27, and closings exceeded openings for the first time (13 open; 14 close). The years of peak activity (1968 and 1972) reveal the following:

1) 1968 - 4 computer-technical schools opened and three closed. Four of the openings and three of the closings were business-secretarial schools.

2) 1972 - Flying schools accounted for 3 of the openings. Another 3 were in the area of arts, and 5 were business-oriented. Seven of the closings were business-oriented schools, and three were computer-technical. (see charts 1-2 and 1-3)

The overall trends reflect the effect of the proprietaries, since public and private schools were largely stable. Thus 1968 and 1972 were also peak years, in terms of turnover. Of the 16 closings in 1972, however, 6 were business schools that had opened since 1968. In fact, more than one-third (30) of the 88 total closings involved "new" schools (i.e., those that opened after 1963). All but two of these new closings were proprietaries. (The two were Grahm Junior College, which reopened in 1972, and the Boston University Insurance Institute, which was actually transferred to Northeastern University in 1968.) Nine of the 30 were computer-technical schools.

From these figures, it is possible to attribute the bulk of the turnover in schools to proprietary institutions. They account for 83% of the closings and 80% of the openings. The largest single contributor to closings was the category of "new" schools; almost one-third of them were computer-technical proprietaries.

With the exception of these computer-oriented programs, the distribution of schools remained relatively stable. The 1963 percentages by type were: public - 26%; private - 14%; proprietary - 60%. By 1972 these figures were: public - 24%; private - 15%; proprietary - 61%. The overall picture is one of little substantive change in the character of the schools. The major exceptions are:

1) Computer-technical schools (as noted above). In addition to the basic decline in this category, it should be noted that 3 corporate affiliated technical schools opened in 1971 (Honeywell, ITT, and Sylvania), preceeded by Control Data in 1968. None of these schools have closed.

2) Flying schools began to appear in 1972, with 3 new openings.

3) Continuing Education programs opened at several private institutions (Northeastern - 1971; Bentley College - 1972; Curry College - 1972) and at Middlesex Community College - 1972.

The high rate of closing for new schools (more than 25%) seems to indicate that the conservative approach of the Educational Exchange has somewhat understated the number of turnovers. Since most of the openings (80%) were proprietary schools, it seems likely that several proprietary schools opened and closed without appearing in the catalogue. Although this would tend to create a more volatile situation among part-time schools in the Greater Boston area, it seems unlikely that this factor would make a significant difference. The most probable effect would be to heighten the observable trends to a small degree; that this factor would mask any major trends is unlikely.

Courses

In this section, course offerings of the various schools over the last ten years (1963-64 to 1972-73) will be examined. As in the previous section, the method of data collection imposes some limits on the analysis. Courses offered by schools not listed in the catalogue cannot, of course, be covered. Furthermore, in some cases, the actual listing fails to reflect the full depth of offerings in a specific area. While it is possible to investigate further by cross-checking various school catalogues, this was not done. The effect of such possible incomplete information is minor, since few schools and offerings are affected. Another possible source of inaccuracy is the fact that listings reflect expected, rather than actual, course offerings. In some cases, it is possible that courses were dropped because of low enrollment or other factors. It is impossible to estimate the possible influence of this factor on the final results.

Commerce and Finance

Included in this category are most of the business and secretarial courses, including computer utilization. The bulk of these courses are offered by large private institutions, including Bentley College (Evening division); Boston University (Metropolitan College); Bryant and Stratton School; and Northeastern University (University College). A large number of proprietary schools--some of which are focused on only a few topics--also offer commerce and finance courses. Several municipal adult education programs provide limited programs in this area.

The dominant trend in commerce and finance over the ten year period is stability. There have been no new subjects introduced. Most subjects have maintained a constant number of schools and offerings throughout the period. But while there has been little overall change, the turnover in the schools has been high. Many schools have closed in this area, but the basic balance has been kept by the opening of new schools and the increased course offerings of existing schools. Very few schools have merely ceased offering commerce and finance courses; they usually either continue their same offerings, or they close. Exceptions to these generalizations will be considered below:

AUTOMATION, Business - This category reveals the rapid rise of computer-oriented courses, and the subsequent closing of many of the new schools. The initial expansion--from 47 courses in 1963 to 78 courses in 1965--resulted largely from the expansion of the

Bryant and Stratton (1 to 14) and Northeastern-University College (5-10) offerings. A second rapid rise (from 80 offerings in 1967 to 148 in 1971) resulted from the continued expansion of Northeastern and Boston University-Metropolitan College as well as the appearance of many new proprietary schools, such as Computer Institute, Electronic Computer Programming Institute, Computer Programming Center of Boston, etc. Parallel with those openings was the continued closing, throughout the period, of many of these newer computer schools. By 1972, the expansion had ended with 3 fewer courses and 5 fewer schools than the year before.

INVESTMENTS - Until 1968, this area was a prime example of the unchanging business subject. From 13 schools offering 17 courses in 1963, it increased to 14 and 18, respectively, in 1967, with only 1 school closing. But a rise began in 1968 that resulted in a total of 21 schools with 27 courses by 1972. The cause was new offerings by public and private continuing education and adult education schools from 1969 on.

PERSONNEL MANAGEMENT - The same effect of the newer programs is seen in this subject. An increase from 7 to 12 schools and 11 to 16 courses for 1970 to 1972 was exclusively caused by private continuing education and evening school programs (and one public - Middlesex Community College - in 1972).

SHORTHAND - This area shows the reverse: a slight drop in course offerings caused by the closing of several proprietaries, without the new interest of private continuing education programs.

Thus, the area of commerce and finance reveals an even availability of courses, even though there is an often high turnover rate of proprietary schools.

Engineering, Technology and Trades

In one respect, this area was as unchanging as commerce and finance. The trade courses and some of the engineering subjects exhibited little or no change in either number of offerings or number (or type) of schools over the ten year period. On the other hand, several new categories appeared and some subjects showed significant gains in offerings and schools. Some of these are examined below:

AERONAUTICS - This area shows two significant changes: 1) in 1965, Boston University (Division of Continuing Education) ceased offering 16 aeronautics courses, bringing the total down to 3 proprietary schools giving 7 courses. By 1968, Northeastern-Lincoln College had entered the field with 9 courses; one of the proprietaries increased its offerings from 2 to 6 by 1969. Three new schools, offering a total of 4 courses, by 1972, brought the field to its 1972 total of 7 schools and 22 courses.

FLYING - A total of seven new schools opened after 1968, offering by 1972 a combined total of 26 courses. This was the major component of an increase from 1 school/9 courses in 1966 to 10 schools/54 offerings in 1972. The 7 new schools included 5 proprietaries, 1 private, and the Mass. Bureau of Adult Services (1 course in 1972). Northeastern-Lincoln also began with 12 courses in 1968.

CIVIL ENGINEERING - Many of the increases in the engineering and technology area were the result of Northeastern's expansion. An example of this can be seen in civil engineering, where the Northeastern-Lincoln offerings grew from 1 in 1965, to 4 in 1966, and to 17 in 1968. (Out of a total of 3 schools and 22 courses).

ELECTRICAL ENGINEERING, GENERAL - Another example of Northeastern's influence: from 1963-64 to 1970-71, this subject saw a modest increase from 8 schools/10 courses to 8 schools/18 courses. The whole of that increase was the result of Northeastern-Lincoln's expansion from 1 to 8 courses. But in 1971, Northeastern's Center for Continuing Education opened with 37 offerings, bringing the total to 7 schools/51 courses.

NEW COURSES - Five new course areas were listed in 1971, all of them at Northeastern's Center for Continuing Education. They were: Biomedical Engineering (2 courses); Engineering Management (11 courses); Environmental Engineering (6 courses - Mass. Bureau for Adult Services offered 2 in 1972; Lincoln offered 3 in 1972); Food Engineering (4 courses); and Optical Engineering (14 courses). Computer Engineering Technology was first offered in 1970 by 3 schools (Northeastern-Lincoln, and two proprietaries with 1 course each) and grew to 5 schools by 1972 (Northeastern-Lincoln, Bryant and Stratton, Bentley College, Control Data Institute, and Sylvania Technical School - 1 course each).

The leader in these fields (engineering and technology), in terms of both size and innovation, is clearly Northeastern University. Its Lincoln College and Center for Continuing Education offer a number and diversity of courses unmatched by any other school.

Academics

Largely dominated by the big private colleges, this field differs from the others in several respects. The effect of school closings is minor in this area, since few of the schools offering these courses have closed. Most of the offerings have increased steadily over the 10 years studied, even in cases where the number of schools has remained constant. Several new areas have been introduced -- and have grown markedly -- in the last decade. And few proprietary schools play a significant role in the course offerings.

As in engineering and technology, one of the most significant factors has been Northeastern University, with its Lincoln and University Colleges and Center for Continuing Education. While Northeastern has been less of an innovator in the area of academics, it has generally offered considerably more courses than any other institution.

Another significant trend has been the very recent rise of community college and continuing education programs. Almost every subject experienced an increase in the number of schools and offerings in 1972 as a result of these new schools.

Among the more interesting subjects are:

Sciences:

ASTRONOMY - An increase in Boston University (Metropolitan College) and Museum of Science offerings brought the total number of astronomy courses from 4 in 1969 to 19 in 1972.

BIOLOGY - A more rapid rise in the number of courses (26 in 1963 to 83 in 1972) than in the number of schools (14 in 1963 to 23 in 1972) can be attributed to Northeastern-Lincoln's increase in offerings (first entered in 1966 with 16, 1968-22, 1970-33).

CHEMISTRY - While the number of schools has remained very steady (a maximum fluctuation of 4 schools), the number of courses rose from 36 in 1965 to 59 in 1966. The whole increase was the result of Northeastern-Lincoln's rise in course offerings from 6 to 30.

NAVIGATION - The closing of two proprietary schools (one in 1965, the other the following year) brought these offerings from 20 in 1964 to 2 in 1966.

OCEANOGRAPHY - A new subject first offered by Northeastern-University College in 1966, it grew to 4 schools (B.U.-Metro, Mass. Bureau of Adult Education, Newton Junior College, and Northeastern-University College) offering 5 courses in 1972.

Mathematics

ALGEBRA - This area is typical of the slow increase in academic courses. From 21 schools giveng 29 courses in 1963, it has grown to 28 schools giving 42 courses in 1972. The large private schools (BU, Northeastern, Suffolk) offer slightly more courses than the others, which are public (adult education programs) and proprietary.

Social Sciences

CURRENT EVENTS - This area has shown a slow decline, from 9 schools/13 courses in 1963 to 5 schools/5 courses in 1972. Rather than showing the effect of school closings, this drop reflects a change in course interest from general current events to more specific issues covered by such areas as government, urban problems, and international affairs.

ECOLOGY - This category first appeared in 1970, offered by 2 schools (BU-Metro. College and a proprietary concerned with conservation). By 1972, 9 schools were offering 15 ecology courses. BU was the prime innovator, with 6 courses in both 1971 and 1972.

DRUG EDUCATION - This was offered by the Mass. Bureau of Adult Education, for the first time, in 1971 (1 course) and again in 1972 (1 course).

ECONOMICS - This subject has experienced a falling number of courses, with the exception of a Northeastern-University College increase from 1 in 1965 to 26 in 1966. Northeastern also led a cutback of major schools in 1968-1970 (from 26 to 13 courses), followed by Boston University-Metropolitan College (from 13 to 8) and Suffolk University (from 10 to 5) between 1969 and 1972. Courses in "Consumer Education" offered by Brookline Adult Education and Stoneham Evening School in 1969 were dropped in 1971.

GOVERNMENT - Another instance of Norhteastern-University College's prominence is this area, where it rose from 10 (out of 41) offerings in 1965 to 21 (out of 52 total!) the following year.

PSYCHOLOGY - This subject saw a period of expansion from 1963-1966 (from 76 to 101 courses), led by Northeastern-University College's rise from 7 to 25 courses and Suffolk's from 8 to 14 courses. The area then experienced a levelling off, both in number of schools and courses.

SOCIOLOGY - Despite relatively erratic changes in the number of schools, the number of sociology courses rose steadily from 1963 to 1972. Primary components of this rise were Northeastern-University College (from 9 courses in 1965 to 31 the following year) and Suffolk (from 6 courses in 1966 to 20 in 1967). The strong entry of several privates in 1972 boosted the totals even further.

URBAN PROBLEMS - First appearing in 1969 with 5 schools offering 8 courses, this category rose to 6 schools/26 courses in 1971. The most significant school in this field was Boston University-Metropolitan College (1 course in 1969; 8 in 1970; 15 in 1971; and 18 in 1972). Private colleges were the major schools offering urban problems courses.

LAW ENFORCEMENT - CORRECTIONS - Although this category first appeared in 1964, it underwent a qualitative change in 1969. Northeastern-University College increased its offerings from 37 to 59, including courses dealing with problems of correctional institutions. Until then, the bulk of these courses had been aimed at security and police problems. Besides the three major private colleges (Northeastern, BU, and Suffolk), two public community colleges, Mass. Bay and Middlesex, offered law enforcement courses (Mass. Bay - 5 each year from 1969 through 1972; Middlesex - 5 in 1972).

Unclassified and Special Programs

CHILD CARE AND DAY CARE - This became a new category in 1969, when it was offered by 1 school, a proprietary. Suffolk (in 1970) and Harvard (in 1971) entered with 2 courses, so that by 1972 there were 10 courses given at 6 schools. No public institutions have offered child care courses.

DENTAL ASSISTANTS TRAINING - After its initial appearance in 1966, this category saw slow growth until 1971, when 9 courses were given by 8 schools, 6 of which were proprietary. MEDICAL ASSISTING follows the same pattern: first offered in 1969 by 1 school, it grew to 5 schools/7 courses in 1971, four of the schools being proprietary.

WOMEN'S WORKSHOPS - A new category for 1972, this was given by 3 schools - Middlesex Community College, Cambridge Center for Adult Education, and the Boston YWCA. This does not include several "Women in History" type courses given by Harvard and BU in 1971 under Education, General.

COLLEGES OFFERING PART-TIME DAY COURSES -- The list of these schools remained constant from 1964-1971, with only 2 schools dropping (Emmanuel and Mass. Bay Community College) and one addition (Graham Junior College.) But in 1972, four schools added part-time day courses (Bentley - summer, Middlesex Community College, Pine Manor Junior College, and Quincy Junior College).

GRADUATE COURSES (PART-TIME) - Eleven schools, including the biggest private colleges in the Boston area, have provided or listed these programs since 1969.

OPENINGS AND CLOSINGS OF SCHOOLS, 1962-1972

	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	TOTAL
Number of Schools	204	208	209	213	218	219	224	225	230	232	
Number of "openings"[1]	--	9	10	10	13	17	16	12	11	18	116
Number of "closings"[1]	--	5	9	6	8	16	11	11	6	16	88
Number of "'new' closings"[2]	--	0	2	0	1	3	7	6	2	9	30
Number of "reopenings"[2]	--	0	0	0	1	0	1	3	0	3	8
Openings by type											TOTAL
Public		--	1	1	1	1	3	--	--	2	9
Private		2	--	1	2	4	--	1	1	3	14
Proprietary		7	9	8	10	12	13	11	10	13	93
Closings by type											
Public		--	1	1	1	3	--	2	--	--	8
Private		--	--	1	--	1	2	1	--	2	7
Proprietary		5	8	4	7	12	9	8	6	14	73
TOTAL by type											
Public	54/26%	54	54	54	54	52/24%	55	53	53	55/24%	
Private	28/14%	30	30	30	32	35/16%	33	33	34	35/15%	
Proprietary	122/60%	124	125	129	132	132/60%	136	139	143	142/61%	

---

[1] "Openings" are new listings in the catalogue. This may represent the opening of a new school or a new program, or the first time the program is listed. A similar set of possibilities exists for "closings".

[2] "New closings" are institutions which have "opened" since 1963 that have subsequently "closed". "Reopenings" are institutions that were listed as "closed" and have subsequently reappeared in the catalogue. Year shown is that of reopening.

II.N.2. The Boston Model Cities Higher Education Program

Background of the Higher Education Program, Inc.

The Higher Education Program, Inc. was planned and brought into being by the Boston Model City Administration and a volunteer planning committee representing the major colleges and universities in the Boston area and residents of the Model Neighborhood. The Program is examined here for the insights its experience provide into the problems of interinstitutional cooperation in serving new clienteles which historically have not been the clienteles of focus of the institutions involved.

Through the City Demonstration Act of 1966, the Model Cities Program was created to demonstrate that there are more efficient and effective ways to deliver services, and to begin the process of effecting institutional change. These objectives were to be the guiding principles for a program of higher education in the Boston area.

In this instance, the "service" to be delivered was access to a college degree for Model City residents. During the 1960's, steps were taken to alleviate inequality of educational opportunity through programs designed to provide preparation for and places in institutions of higher education for young minority students.

Rather than duplicating these efforts, Model Cities decided to concentrate on a potential group of students who had been completely overlooked, those beyond traditional college age. The planning Committee of Model Cities wanted to devise a method for making a degree more accessible to this group and for providing interinstitutional cooperation. In the process the program was to act as a vehicle for institutional change. The concept of the Higher Education Program was the result.

In deciding what was needed, Model Cities examined the institutions of higher education existing in Boston. The metropolitan area contains a concentration of institutions of higher education unequalled anywhere in the United States. A decision was made to employ the existing resources of these institutions rather than duplicating efforts in a new program and to set the groundwork for modifying their attitudes and policies toward Model City residents.

Still in the planning stages, a group of Boston area colleges formed a curriculum committee to devise the means for implementing a program of access to college degrees. Following initial meetings the committee defined itself as an advisory body which would establish parameters for curriculum development and would act as resource persons for the staff when hired. Discussions concerning possible means for granting credit were a part of the curriculum committee discussions. Although no definite policy emerged, the basis for later credit agreements was laid in the committee meetings.

A set of curriculum units were approved by this committee for use in the first semester of the Higher Education Program. Curriculum was written, meetings were held with representatives of consortium colleges, and faculty and students were recruited. Classes began in February, 1970, with an enrollment of 125 students, a low figure because of temporary space constraints. Courses were offered in five curriculum areas (art, communications, mathematics, science, and social science).

Components of the Higher Education Program Consortium

The consortium concept was basic to the development of the Higher Education Program. The curriculum committee lent its support to this concept and was instrumental in providing the groundwork for its further development.

Over a three-year period twenty schools have participated in the consortium, some more actively than others. The functions of consortium members are to: issue credit for work accomplished in the Higher Education Program; facilitate the process of transferring students into degree-granting programs; provide faculty for teaching and writing curriculum; and provide administrative assistance as members of the Board of Trustees of the Higher Education Program Corporation.

How well has the consortium functioned in fulfilling these tasks? As regards the first, the issuance of credit has taken various forms. They are:

1. Acceptance of all courses successfully passed. Some schools do this. However, no policy has been set. This procedure takes place with individual students who apply for admission to certain colleges.

2. Blanket credit for specific courses. Different schools have given this credit for certain courses.

Not all consortium schools have provided credit for Higher Education Program courses. Although colleges closely guard the issuance of credit, more can be accomplished. A more concentrated follow-up may have provided greater success in this area. Unfortunately, staff became so involved in daily operational problems that time was not available to pursue this matter further. If one school gave blanket credit for one of the five departments, only five schools would have to give direct credit. This credit, filed in the registrar's office of each college would be transferable to other colleges.

The first credit arrangement mentioned above worked out well, but has several drawbacks. The most obvious is that students can not transfer courses to a school outside of the consortium. Also, although the schools involved have been quite committed to this arrangement, there remains a tenuous quality to it. Students question the arrangement since credit for courses they have taken does not become "real" until the point of transfer. This arrangement created a credibility problem in recruiting students and in convincing them that they would in fact receive credit. The second credit arrangement mentioned above is more acceptable from the student's point of view, although it is much more difficult to obtain.

Curriculum

The curriculum for the Higher Education Program is roughly comparable to the basic liberal arts courses given in many institutions. There are two divisions: the humanities, which includes communications, social sciences and art; and sciences, which includes offerings in biology, chemistry, physical and computer sciences, and mathematics.

These courses are offered on a semester basis and classes are held from 9:00 A.M. to 9:00 P.M. Courses meet 3 hours a week (with the exception of science courses) and correspond to a 3 semester hour course at most universities. The course format is thus traditional.

The difference between courses offered at the Higher Education Program and those offered at traditional universities is primarily a difference in process. Content is essentially the same. The disciplines represented in the HEP course offerings have been adopted for presentation to a group of adult students who have not been "programmed" to think in the traditional academic manner. The process involved takes into account the personal and work experience which any person over 30 brings with him to school. Students are expected to learn a new way to think about problems and to organize their thoughts and actions to accomplish given objectives. The result should be a student who can "do" math and "do" writing.

This process of teaching and learning is facilitated by the small class size built into the program. The average student-teacher ratio is ten to one, allowing the instructor the time to work with students at different levels.

Class work is evaluated on a pass-fail basis. A detailed evaluation form is used which describes the work a student has accomplished and which indicates whether or not a student should receive college credit for the course. At the point of transfer, a student's set of courses recommended for credit is forwarded to the school to which he has applied.

In past summers a curriculum conference has been held to revise and make changes in the curriculum. Curriculum coordinators, teachers, and students particupate in these sessions. The intent is to upgrade the curriculum and to formulate courses in response to student need.

Faculty

The faculty of the Higher Education Program is a diverse group teaching under varying arrangements. The categories break down as follows:

1. Higher Education Program Staff--each curriculum coordinator teaches at least one class per semester. This arrangement keeps staff in close touch with students and aids in curriculum writing and contact with other teachers.

2. Community leaders with expertise in certain areas--for example, legislators, poets, television producers, science researchers, etc. teach courses in their field of competence.

3. Released-time faculty come to the HEP from the schools where they teach. These schools allow teachers one course at the Higher Education Program as a part of their regular course load.

4. Volunteer teachers--each semester one or more teachers come to the program because of a personal commitment to its goals. Volunteer teachers generally are full-time professors at local colleges and universities.

5. Paid faculty fill the remaining teacher openings. Graduate students have been used in these positions and special instructors deemed especially valuable as teachers in this setting.

This arrangement of faculty has both advantages and disadvantages. The consortium schools benefit from this part-time arrangement. Faculty at the Higher Education Program return to their institutions with new ideas from their teaching experience. They also act as advocates for the program and ease the process of granting credit. On the other hand, a lack of intra-faculty contact due to the part-time situation causes a certain lack of cohesion. All faculty have other full-time committments which make meetings of faculty very difficult to schedule.

Staff

The staff of the Higher Education Program is composed of persons with varying skills and background. A successful attempt was made to hire staff from within the Model Neighborhood. The staff is composed of a Dean, administrative personnel, curriculum coordinators, and student advisors.

Staff problems have affected the efficiency of the program to some extent. The staff of the Higher Education Program is composed of persons with greatly varying skills and background. Lines of administrative responsibility have been muddled from the beginning of the program. The incorporation of the Board of Trustees for the HEP corporation in March of 1972 and the selection of a Dean who is responsible for the program has alleviated this situation.

Another major staff problem has been the general weakness of the counseling staff. This weakness effects the smooth transfer of HEP students into consortium colleges and universities. Ongoing relationships have been developed between the HEP counseling staff and admissions offices of only some of consortium institutions. The solution is more effective personnel on the HEP side. The second answer is to designate a person from the admissions office of each consortium institution as a part of an ongoing curriculum committee. Constraints of time and money have also acted to limit the effectiveness of this advising staff.

Students

The general criteria for accepting a student are:

> "A prospective HEP student should be within the ages of 25 to 50. He or she should show signs of maturity, motivation, and a potential to do college work. The overall admissions policy aims for a student body which reflects the ethnic background of the Model Neighborhood. It also aims at a balance between men and women."

None of the criteria are viewed as inflexible or rigid. It is difficult if not impossible for a counselor to determine maturity or potential to do college work in one meeting with a prospective student. The policy is by design one of open admissions.

Most of the student body consists of residents of one of the Boston Model Neighborhoods. Morning classes (9:00 to 12:00) have more women than men because women with small children are more apt to be at home mornings. Evening classes are more evenly distributed with men and women.

The problems associated with this age group can be generalized. A series of practical problems affect scheduling, class attendance, home assignments. For the most part HEP students have family responsibilities. Baby-sitters must be found and teachers must be sympathetic to absence due to sick children. Many students must work and schedules must be geared to this. The hours between 9 and 12 A.M. and 6 and 9 P.M. are the most convenient--morning hours for mothers and persons wirking middle shifts and evenings for those with full-time jobs. In addition to the practical problems of finding the time and energy for school, students share many of the same fears in their approach to school. Having been away from an academic environment, or never having participated, they are insecure and apprehensive about their abilities in a school setting. Many Higher Education Program students have previously failed in school. An informal supportive setting is therefore essential to success for these students. All staff members must work to create this setting. Counselors must be available and seek students out. Small class size makes it possible for teachers to have time to get to know each student. Curriculum coordinators must make teachers aware of the needs of students.

Higher Education Program students make the decision to come to school primarily as a means to improve their lives economically. Quite simply, a college degree means more money on the job. There is no tuition charge so the cost to students involves only transportation and, in some cases, babysitting.* The HEP program provides an opportunity for students to try out college courses and to make the decision whether or not to go on.

---

* As originally conceived, the Higher Education Program was to provide stipends on a sliding scale, enabling students to attend school on a full-time basis. However, stipends were never provided on so large a scale. Due to budget cuts the amount of stipend money was continuously decreased. Some students receive a stipend which covers little more than transportation and babysitting costs. Stipends are determined according to need by review of a financial aid committee.

In six semesters, 1038 students have registered in the program (including some students who never came to classes). Initially, due to financial and space pressures, attendance was deliberately kept at a figure around 150. Once established in its present site, enrollment moved to approximately 350 students per semester. The program as presently designed cannot handle more than 400 students per semester because of financial and space restraints. With little publicity it has been easy to maintain a figure close to this number. Outreach programs are still minimal. Students come to the HEP because they have heard about it from friends, from their Model Neighborhood offices or from discussion on the black community's radio station, WILD.

From the total number of students enrolled, 110 have been admitted to degree-granting institutions. Of these 110, 90% or approximately 99 have remained in school. The grade averages of HEP students once they enter college has been consistently average or above average. These figures are based on data gathered by routine contact with all Higher Education Program students who have entered college, and from an in-depth survey of twenty-four students admitted to one of the consortium colleges. A ninety percent retention figure is well above the national average for students entering college.

Lessons from the HEP Experience

The achievement of the Higher Education Program provides a useful model for development of the consortium idea. A group of schools joined together, pooling faculty, and counselors, and providing a small staff can provide the special setting necessary to attract an adult student population. Sponsored research personnel from member institutions can work on foundation grants to support such programs prior to the point of student transfer. Tuition can be charged on a sliding scale.

Considering the numbers of adults who for one reason or another were unable to continue their education within the traditional (if arbitrary) time-frame, the demand for such programs should be great wherever there exists a group of colleges willing to form a consortium. In the long run, cooperation in the areas of special admission, continuing education, etc. should result in better, more comprehensive programs. This particular student population appears to be very highly motivated. They give up more to get an education and understand the reasons why they are in school. Many have years of solid job experience and an approach to getting things accomplished. The strain of returning to school is greatly alleviated by attending classes in a setting specifically geared to the special student.

Rather than each college staffing such areas as continuing education, a consortium staff with each member institution contributing a percentage of total cost could provide better services to special population students and a lower total cost to each school. The consortium as a whole supports initial stages and each school accepts students separately.

From a perspective of three years of operation, the major flaws in the Higher Education Program would seem to be:

1. A lack of sufficient planning time due to political pressures on Model Cities. Both the community being served and the funding source (HUD), were anxious to see visible, working programs. For this reason the Model Cities Administration felt the pressure to implement a high impact program to demonstrate that something real was occurring. As a result, the Higher Education Program opened its doors to students with several major aspects of the program insufficiently thought out. Although Model Cities benefited from this action, the program faced a set of consequences which had a negative affect of the functioning program.

2. The consortium concept, essential to the program, was not developed in a totally satisfactory manner. The initial decision to leave the structure of the consortium open-ended was a good one. However, after the program had functioned for a year, a workable mechanism should have been selected from among possible alternatives. At this point written agreements between consortium members and the administration may have formed a sounder framework for the continuation of the program. At this point, the consortium arrangement remains tenuous, and exists at the good-will of member institutions. Possibly, a curriculum committee and an admissions committee reporting to the Board of Trustees and made up of representatives of consortium institutions, faculty and staff of the Higher Education Program. Such committees would be able to refine specific program areas and provide greater cohesiveness for the consortium.

   A second weakness of the consortium results from the fact that it was brought into existence by an outside agency, Model Cities. It did not emerge from perceived needs of member institutions.

3. Internal staff and administrative problems have impeded the success of the program.

BEST COPY AVAILABLE

III. CURRENT CONTINUING EDUCATION AND PART-TIME CLIENTELE IN MASSACHUSETTS

OVERVIEW. III-1

A. Student Characteristics. III-5

B. Comparison of Students Characteristics to Census of Population Characteristics. III-65

C. Special Clientele Groups III-75

OVERVIEW OF THE CURRENT CONTINUING EDUCATION AND PART-TIME STUDENT CLIENTELE IN MASSACHUSETTS

A survey of continuing education students was conducted to determine the current clientele of continuing education programs (as defined by this study--see Introduction, Section I.D). The survey included public and private degree-granting institutions. The goals were to determine 1) personal and family information--what kinds of people are currently participating; 2) program and course information--what student needs are now being met; 3) motivational information--for what reasons are students enrolled; 4) reactions to possible changes in program offerings--what demand exists for new programs or changes in delivery? About 6,000 students or 7% of the total continuing education population were sampled and responded to 74 questions in these areas. The selection of the sample, and reliability of results are discussed in Section III.A.9.

In general, the current student clientele is young, affluent, upwardly mobile from their parents' level of education and jobs, and already employed in professional or managerial jobs. Two-thirds of students are men, one-third women. The primary reason for enrolling in continuing education is job advancement.

This general profile is surprising in light of the general view that continuing education provides a form of "second chance" for those who did not have the resources to attend college at age 18-21. In fact, the current student clientele is middle class in nature. Most are already earning moderate to high incomes at 25-35 years of age and are destined to be earning even higher incomes by age 50-55 (the peak of typical age-earnings curve). The group is highly internally-motivated, and they already have some college or even graduate education. See Section III.A.1, 3, for detailed analysis.

The current continuing education population does not include large numbers of disadvantaged or other minority groups. Although percentages of Blacks and Spanish-Americans are included in programs equivalent to their percentage in the population, more should be represented given their low educational background relative to Whites. Women are only one-third of the total student population, and many of these women are teachers taking extra education courses. Disadvantaged or welfare mothers, and women returning to careers after child-rearing are not adequately represented in the current student population. See Section II.B for detailed analysis. It would appear that greater measures of outreach and financial aid would be necessary to attract these groups to continuing education.

The demand of the current student clientele for new programs is relatively conservative. Only moderate interest is expressed in an "open university" (defined as expanded home television and corres pondence) or in additional branch or local campuses. Even less interest is expressed in courses offered in work places or longer class meetings as on weekends. Apparently the once or twice a week classroom meeting is satisfactory.

Greatest interest is expressed in expanded counseling services and credit for experience. If counseling is needed for the highly motivated students currently enrolled in programs, it is likely that counseling is crucial to bringing in currently excluded groups.

The current student clientele is interested in even more courses of an academic and professional or graduate nature, rather than trade, community service or avocational nature. See Section II.A.4 for detailed analysis.

The current student clientele does not vary significantly between public institutions and private institutions. Although public institutions charge lower tuition per course than private institutions, it appears that the distribution of incomes and occupations is the same for students in both (See Section III.A.6).

Cost does not appear to be a significant factor in the decision to attend for those currently enrolled. Apparently the cost per course ($50-$150) is low enough relative to income to not be a significant barrier to attendance. In addition, many students are reimbursed by veterans or teachers vouchers or by employers. However, the cost differential between public and private institutions is undoubtedly of some effect on the choice of schools. It is also likely that cost is a barrier to lower income individuals not currently represented in programs. See Section III.A.3, 6, for detailed analysis.

BEST COPY AVAILABLE

A. Student Characteristics

1. Profiles of Students in Continuing Education III-5
   Men in Continuing Education III-5
   Women in Continuing Education III-5

2. Participation in Continuing Education III-7

3. Motivations for Enrollment. III-8

4. Reactions to Possible Changes in Current Programs . . III-10

5. Responses to Survey of Continuing Education Students: Simple Frequency Distributions. III-11

6. Responses of Students in Public and Private Institutions: Simple Frequency Distributions. III-24

7. Responses of Students in Two Year and Four Year Institutions: Simple Frequency Distributions. III-37

8. Responses of Students in Community Colleges, State Colleges, Other Public Colleges, Private 2-Year Colleges, and Private 4-Year Colleges: Simple Frequency Distributions III-50

9. The Sample of Continuing Education Students: Sample Design and Reliability of Results. III-60

III.A.1. Profiles of Students in Continuing Education

Two-thirds of continuing education students are men, one-third women. A separate profile of men and women is given.

Men in Continuing Education

The typical male student is young (51% are between 25 and 35), white and native-born, married and likely to have children.

Although 82% of these men have attended a school beyond high school, only 59% have received a degree higher than the high school diploma. 22% have attended graduate or professional school, but only 8% have a graduate degree.

Male students are upwardly mobile: only 25% of their fathers and 18% of their mothers went beyond high school. 33% of their fathers were professionals or managers, while 62% of these men are already in professional or managerial positions.

These men are holding down full-time jobs (86%) or looking for work (2%). They are already holding responsible positions. 62% of those working are professionals or managers. 11% are protective service workers (firemen or policemen). They are already receiving good incomes; 53% are earning over $10,000 a year and 62% are in families of combined incomes over $10,000.

52% are veterans of the Armed Forces.

The male students who are married have wives who are less educated than they (51% went beyond high school). Their wives generally do not work (55%) and if they do work it may not be full-time (42% work less than full-time).

Women in Continuing Education

The typical female student is also young; a surprising 39% are under 25. But, a higher percentage of women than men are over 35 (27% of women compared to 22% of men).

Women students are more likely than men students to be single (46% are single) and less likely to have children.

The educational background of women is similar to that of men; 25% have already received some graduate or professional training but only 11% have as yet received a degree.

Women students in general grew up in families of higher socioeconomic background than men students: 35% of their fathers and 30% of their mothers went to school beyond high school. 40% of their fathers were professionals or managers. Their mothers were also likely to have worked (18% as professionals).

Women students are less likely than men to be working, but a higher percentage do — 70% are working or looking for work. Of those that work a higher percentage than men hold less than full-time jobs (29%).

Of those working, 51% are professionals and 31% have clerical jobs; 55% work in professional services (schools, hospitals, community organizations). However, only 14% are personally earning over $10,000.

When their husbands' income is considered, however, married women come from high income families. 50% live in families with incomes over $10,000. Their husbands hold jobs as professionals or managers (63%).

III.A.2. Participation in Continuing Education

Men students are heavily concentrated in business (23%) and professional (27%) stubjects and regular academic (25%) subjects. Women are more concentrated in social or community service (28%) and regular academic (42%) subjects than men. Women also dominate the subjects of arts and crafts, family, personal and cultural interest, while men dominate trade, industrial and technical subjects.

85% of the students are enrolled in the continuing education division; 13% of the students in these continuing education courses are full-time day students at that institution.

Most students are taking these courses for credit; about 5% of the courses were non-credit, and only 6% were taking any of these courses on a non-credit basis.

Men are taking more courses on the average (2.3 courses) than women (1.8 courses).

Most students (90%) got to class via private auto. Public transportation was little used (6% via bus or subway).

About 18% reporting were taking the class in a branch campus.

Students live, on the average, fourteen miles away from class; and take about twenty five minutes getting home from class.

III.A.3. Motivations for Enrollment

Continuing education students are highly motivated by job and career advancement: 83% of men and 70% of women state as their main reason for participation to improve or advance in a job or to get a new job. Men expect to advance in their current firm while women more than men also think of getting a new job: only 9% are in continuing education for general information, the remaining for three other categories of social or personal interests.

Although most students are taking courses for credit, they are not necessarily degree candidates. Men are more likely than women to be degree candidates (88% vs. 77%). 30% are studying for a graduate or professional degree.

Motivation for job advancement is internal: 67% of men feel the program necessary for their own job advancement, while only 12% report that their employer requires it or that the program is necessary to take a licensing exam. 58% of men taking courses for job advancement are upgrading current job skills while 42% are retraining in a new area of skills. An even higher percentage of women are in a new area of skills (48%).

Expectations of job advancement are high: about 75% of those hoping to get a new job expect to work as professionals or managers (compared to 60% working now in those job categories). 25% expect to receive a yearly salary increase of over $2,000.

Students had previously dropped their schooling (90%) for a variety of reasons: lack of finances (23%), marriage (6% for men and 25% for women), to serve in armed forces (16% of men), and other personal reasons, but not because of a poor record (only 6%).

Most students found out about the continuing education program through their own initiative or from friends or family. 17% of men found out about the program at work (10% of women) while only 10% of men and 15% of women heard of the program through public communication services --newspapers or brochures.

Students are in continuing education mainly because of the convenience of hours (72%). Their choice of one particular school over others has to do with closeness to home or office (34%), low cost (20%) and that this school may be the only institution offering the program in the area (22%). Quality considerations are minimal (11%).

Students seem to be paying on the average about $80 per course. 59% of men and 24% of women report that they are being reimbursed either in part or in full for this course. 56% of those being reimbursed are on a veteran's subsidy, 54% receive an employer subsidy--14% from a government employer and 40% from a private employer. Of women receiving a subsidy (only 24% do), 54% receive a subsidy from a private employer, 10% have a teacher's voucher and 11% receive a subsidy from the school (vs. 2% of men).

Not surprisingly, women are more concerned with the fee for the course (44% considered the course fee when deciding to enroll vs. 34% of men). 61% of women and 45% of men say they would take more courses if they were cheaper.

However, of those being reimbursed, 71% of men and 78% of women state they would still take the course if they had to pay the entire cost themselves.

About 22% of students do not plan to take more courses next year; 30% of those not continuing will have completed degree requirements, neither lack of veterans or teachers subsidy nor cost of courses is a problem (only 14%).

III.A.4. Reactions to Possible Changes in Current Programs

Both men and women students are interested in more courses of an academic and professional or graduate nature: 58% state they would use courses if more were offered at the professional or graduate level. 54% would use academic courses if offered. Less interest is expressed in total in other course areas: 50% of women state they would use social and community service courses (36% of men) and 51% arts and crafts, cultural or personal interest (33% of men). Men express some interest in business courses (42% vs. 23% of women) and trade or technical courses (39% vs. 25% for women).

Greatest interest in program change is for counselling services and credit for experience. 61% of men and 67% of women state they would use more counselling services and 72% report they would utilize an opportunity to get credit for experience.

Of those married, 55% of men and 59% of women state they would go to a family center where programs for adults and children would be offered separately but at the same time and in the same building.

Moderate interest is expressed in an "open university" program (defined as expanded home television and correspondence) and in more branch or local campuses. 41% state they would use an open university program, 45% another branch campus.

Only 27% of men and 41% of women think more courses should be offered in work places and only 22% would be interested in longer class meetings such as on weekends.

III.A.5. Responses to Survey of Continuing Education Students: Simple Frequency Distributions

I. **In the following section questions were asked about students and their background.**

Question:		MALE	FEMALE
1. What is your age as of this day?			
	1) under 25	27%	39%
	2) 25-29	32%	21%
	3) 30-34	19%	13%
	4) 35-44	15%	16%
	5) over 44	7%	11%
2. What is your sex?		66%	34%
3. How would you describe yourself?			
	1) Black or Negro	3%	2%
	2) Oriental or Asian	1%	1%
	3) Puerto-Rican or Spanish	1%	1%
	4) White or Caucasian	92%	94%
	5) Other	2%	2%
4. Were you born or was your father born in a foreign country?			
	1) no, native born	80%	81%
	2) yes, father foreign-born	16%	14%
	3) yes, both foreign-born	5%	5%
5. What is your marital status?			
	1) single	33%	46%
	2) married - spouse present	66%	51%
	3) married - spouse absent	2%	3%
6. Do you have any children living at home or away at school but still dependent on you?			
	1) no	50%	58%
	2) yes, one	15%	10%
	3) yes, two	18%	12%
	4) yes, three to five	16%	17%
	5) yes, more than five	2%	2%
7. What is the highest grade or year of school you ever attended?			
	1) less than 12 years	3%	2%
	2) 12 years	15%	20%
	3) 1 year of college	14%	16%
	4) 2 years of college	19%	14%
	5) 3 years of college	13%	9%
	6) 4 years of college	13%	13%
	7) graduate or professional	22%	25%

		MALE	FEMALE
8.	What is the highest degree you ever attained?		
	1) no degree	2%	2%
	2) high school diploma	41%	42%
	3) certificate at post-secondary level	10%	10%
	4) A.A. degree	14%	8%
	5) B.S. or B.A. degree	24%	27%
	6) M.A. degree	5%	4%
	7) Ph.D. or Ed.D	--	--
	8) M.B.A. or D.B.A.	1%	--
	9) L.L.B. or J.D.	--	--
	10) other professional degree	2%	7%
9.	What is the highest level of schooling your father attained?		
	1) 1-8 years	22%	17%
	2) 9-11 years	18%	15%
	3) 12 years	31%	28%
	4) 1 year of college	3%	5%
	5) 2 years of college	7%	7%
	6) 3 years of college	1%	2%
	7) 4 years of college	8%	10%
	8) graduate or professional school	6%	11%
	9) don't know	5%	5%
10.	What is the highest level of schooling your mother attained?		
	1) 1-8 years	18%	14%
	2) 9-11 years	15%	16%
	3) 12 years	44%	38%
	4) 1 year of college	3%	6%
	5) 2 years of college	6%	8%
	6) 3 years of college	1%	2%
	7) 4 years of college	5%	7%
	8) graduate or professional school	3%	7%
	9) don't know	4%	3%
11.	What is your employment status (job for pay) as of this week?		
	1) working outside the home	86%	68%
	2) looking for work	2%	2%
	3) not working outside the home	12%	30%
	For those having or looking for jobs:		
12.	Does the job you have/had or are looking for involve?		
	1) full-time work	91%	71%
	2) more than half, but less than full-time work	5%	15%
	3) less than half-time work	5%	14%

		MALE	FEMALE
13.	How would you best describe the kind of work that you do? (did)?		
1)	Professional/technical	43%	51%
2)	Managerial/administrative	19%	6%
3)	Clerical	4%	31%
4)	Sales	4%	6%
5)	Craftsman	7%	1%
6)	Operative	4%	1%
7)	Laborer	4%	--
8)	Service Worker	3%	4%
9)	Protective Service Worker	11%	1%
14.	What kind of business or industry do (did) you work in?		
1)	agriculture	1%	1%
2)	manufacturing	29%	7%
3)	construction	7%	1%
4)	transportation and public utilities	6%	4%
5)	wholesale, retail trade	9%	8%
6)	finance, insurance and real estate	6%	7%
7)	business and personal services	7%	12%
8)	professional services	20%	55%
9)	federal government	5%	3%
10)	local or state government	11%	3%
15.	What is or was your father's occupation?		
1)	Professional/technical	14%	20%
2)	Managerial/administrative	19%	20%
3)	Clerical	3%	4%
4)	Sales	6%	8%
5)	Craftsman	25%	20%
6)	Operative	13%	11%
7)	Laborer	11%	9%
8)	Service Worker	4%	4%
9)	Protective Service Worker	6%	5%
16.	What is or was your mother's occupation?		
1)	Professional/technical	11%	18%
2)	Managerial/administrative	4%	4%
3)	Clerical	20%	24%
4)	Sales	5%	7%
5)	Craftsman	3%	2%
6)	Operative	7%	5%
7)	Laborer	2%	1%
8)	Service Worker	8%	7%
9)	Protective Service Worker	--	--
10)	Housewife -- never worked outside the home	41%	31%

		MALE	FEMALE
For those who are now or ever were married:			
17. What was the highest level of schooling your spouse attained?			
	1) less than 12 years	8%	9%
	2) 12 years	41%	22%
	3) 1 year of college	12%	7%
	4) 2 years of college	13%	9%
	5) 3 years of college	5%	5%
	6) 4 years of college	12%	18%
	7) graduate or professional school	9%	29%
18. What is the employment status of your spouse as of this week?			
	1) working outside the home	43%	85%
	2) looking for work	2%	2%
	3) not working outside the home	55%	13%
19. If your spouse has or is looking for a job, or had a job outside the home, does (did) the job involve:			
	1) full-time work	58%	92%
	2) more than half, but less than full-time work	9%	3%
	3) less than half-time work	22%	4%
	4) never worked outside home	11%	1%
20. How would you describe the work that your spouse does (did)?			
	1) Professional/technical	32%	42%
	2) Managerial/administrative	5%	21%
	3) Clerical	40%	3%
	4) Sales	6%	6%
	5) Craftsman	2%	14%
	6) Operative	3%	5%
	7) Laborer	1%	4%
	8) Service Worker	3%	2%
	9) Protective Service Worker	--	4%
	10) Never worked outside home	8%	1%
21. What kind of business or industry does (or did) your spouse work in?			
	1) agriculture	1%	2%
	2) manufacturing	13%	18%
	3) construction	1%	9%
	4) transportation and public utilities	5%	8%
	5) wholesale and retail trade	11%	9%
	6) finance, insurance and real estate	11%	6%
	7) business and personal services	13%	13%

		MALE	FEMALE
21.	cont.		
	8) professional services	35%	25%
	9) government	4%	8%
	10) never worked outside home	8%	1%
22.	What was your income in 1972?		
	1) no income	2%	16%
	2) under $5,000	15%	35%
	3) $5-7,000	8%	14%
	4) $7-8,000	7%	8%
	5) $8-10,000	17%	13%
	6) $10-15,000	38%	10%
	7) $15-25,000	14%	3%
	8) over $25,000	1%	1%
23.	What was your total family income in 1972? Please mark 1) if living at home with parents.		
	1) at home with parents	18%	27%
	2) under $5,000	4%	7%
	3) $5-7,000	3%	5%
	4) $7-8,000	3%	4%
	5) $8-10,000	9%	8%
	6) $10-15,000	32%	20%
	7) $15-25,000	26%	23%
	8) over $25,000	4%	7%
24.	Did you ever or do you now serve in the Armed Forces?		
	1) never served	42%	97%
	2) veteran Armed Forces	52%	3%
	3) now serving in Armed Forces	6%	--

II. In the following section questions were asked about participation in continuing education.

		MALE	FEMALE
25.	In what subject area or type of program are you currently enrolled?		
	1) Regular academic subjects	25%	42%
	2) Trade and industrial	3%	1%
	3) Technical	10%	4%
	4) Business	23%	12%
	5) Professional	27%	8%
	6) Social or community service	10%	28%
	7) Arts and crafts	--	2%
	8) Family and personal skills	--	2%
	9) Cultural or personal interest	1%	3%
26.	What is your status as a student?		
	1) enrolled in continuing education or evening division only	85%	85%

		MALE	FEMALE
26. cont.			
	2) enrolled full or part-time in regular day program of this institution	13%	12%
	3) enrolled full or part-time in regular day program of another institution	2%	3%
27. What day of the week does this class meet? If more than once a week, mark this day only.			
	1) Monday	25%	24%
	2) Tuesday	20%	21%
	3) Wednesday	23%	20%
	4) Thursday	25%	26%
	5) Friday	3%	3%
	6) Saturday	5%	5%
	7) Sunday	--	--
28. At what hour of the day does this class begin?			
	1) before noon	7%	10%
	2) 12-3:00 p.m.	3%	1%
	3) 3-4:00 p.m.	1%	--
	4) 4-5:00 p.m.	9%	16%
	5) 5-6:00 p.m.	6%	3%
	6) 6-7:00 p.m.	38%	27%
	7) 7-8:00 p.m.	33%	40%
	8) 8-9:00 p.m.	4%	2%
	9) 9:00 p.m. or later	1%	1%
29. Is this course offered as a credit course?			
	1) yes, credit course	96%	95%
	2) no, non-credit course	4%	5%
30. Are you taking this course for credit?			
	1) yes, for one or two credits	23%	17%
	2) yes, for three credits	65%	68%
	3) yes, for four or more credits	8%	8%
	4) no, not for credit	5%	8%
31. How many courses are you taking currently in continuing education?			
	1) this course only	24%	47%
	2) two courses	38%	34%
	3) three courses	22%	10%
	4) four courses	17%	9%
32. How many hours a week do you spend in study for this class (do not include class time)?			
	1) less than 2 hours	27%	27%
	2) 2-4 hours	40%	34%
	3) 4-6 hours	22%	28%
	4) 7-10 hours	8%	8%
	5) over 10 hours	4%	3%

	MALE	FEMALE
33. How many students are there in this class?		
1) less than 5 students	1%	--
2) 5-10 students	6%	4%
3) 11-15 students	15%	14%
4) 16-20 students	20%	19%
5) 21-30 students	36%	36%
6) more than 30 students	23%	26%
34. How does your taking this class fit into your daily routine?		
1) class directly from work	30%	19%
2) leave work, go home, class	40%	36%
3) leave work, eat out, class	9%	6%
4) class before work	5%	2%
5) class from home	16%	37%
35. How did you get to class this week?		
1) Driver, private auto	84%	73%
2) Passenger, private auto	7%	16%
3) bus or street car	2%	4%
4) subway	2%	2%
5) taxicab	--	1%
6) walked	4%	5%
36. How far in miles is your present residency away from this class?		
1) 0-5 miles	27%	32%
2) 5-10 miles	22%	23%
3) 10-15 miles	16%	17%
4) 15-20 miles	12%	13%
5) 20-30 miles	13%	11%
6) more than 30 miles	10%	5%
37. Is this class held in the main campus of the institution or a branch campus?		
1) main campus	80%	85%
2) branch campus	18%	14%
3) work place	2%	1%
38. How long does it take you to get home from this course?		
1) less than 10 minutes	15%	18%
2) 10-15 minutes	18%	20%
3) 16-20 minutes	18%	16%
4) 21-30 minutes	22%	22%
5) 31-45 minutes	18%	16%
6) 26-60 minutes	7%	6%
7) more than an hour	3%	2%

		MALE	FEMALE
III.	In the following section questions were asked about motivations for enrolling in the course.		
39.	Where did you first hear about the course or program you are taking?		
	1) through own search of schools in area	51%	51%
	2) from family	4%	5%
	3) from friends	15%	17%
	4) at work	17%	10%
	5) from job or employment counsellor	3%	2%
	6) newspaper or brochure	10%	15%
	7) radio	--	--
	8) television	--	--
40.	Why are you taking this course in the continuing education division and not in the regular day program?		
	1) applied to day and was not accepted	2%	2%
	2) taking to transfer credit to day program	7%	10%
	3) convenience of hours	74%	68%
	4) course offered only in continuing education	13%	14%
	5) open enrollment in continuing education	4%	6%
41.	Which of the following would you say best describes the reason you are participating in continuing education?		
	1) for general information	7%	11%
	2) to improve or advance in job	65%	44%
	3) to get a new job	18%	26%
	4) for community activity	1%	1%
	5) for personal or family interests	9%	16%
	6) for social or recreational interests	1%	1%
42.	Are you taking courses to satisfy requirements for any one of the following degree programs?		
	1) Certificate or 1 yr. diploma	2%	2%
	2) Associate or 2 yr. degree	27%	20%
	3) Bachelor's or 3 yr. degree	34%	32%
	4) Master's degree	14%	18%
	5) Ph.D. or Ed.D.	1%	1%
	6) M.B.A. or D.B.A.	7%	1%
	7) L.L.B. or J.D.	1%	--
	8) Other professional degree	2%	4%
	9) no, not degree candidate	12%	23%

		MALE	FEMALE
43. If you are not now contemplating a degree or certificate, is your reason because that degree is not now being offered at an institution accessible to you?			
	1) yes, because not offered	15%	17%
	2) no, not that reason	85%	83%
44. If yes to above, what degree or certificate would you like to see offered?			
	1) Certificate or 1 yr. diploma	10%	9%
	2) Associate or 2 yr. degree	20%	12%
	3) Bachelor's or 3 yr. degree	24%	19%
	4) Master's degree	11%	12%
	5) Ph.D. or Ed.D.	7%	4%
	6) M.B.A. or D.B.A.	4%	1%
	7) L.L.B. or J.D.	3%	1%
	8) Other professional degree	5%	8%
	9) no, not degree candidate	17%	34%
45. Is your program of courses a continuation in the same subject area as your last full-time educational experience or in a different subject area?			
	1) same subject area	47%	46%
	2) different subject area	53%	54%
46. When you discontinued your education as a full-time student in the past, what was your main reason for doing so?			
	1) still full-time student	10%	11%
	2) lack of adequate financial resources	24%	22%
	3) poor academic record	8%	4%
	4) serve in armed forces	16%	1%
	5) marriage	6%	25%
	6) dissatisfaction with school	11%	8%
	7) other personal reasons	27%	30%
47. Are you taking your program of courses for job advancement? If yes, what best describes your reason?			
	1) no, not for job advancement	21%	41%
	2) yes, employer requires	7%	8%
	3) yes, I feel it is necessary	67%	44%
	4) yes, to take licensing exam	5%	7%
For those taking the course for job advancement:			
48. If you feel this course will be of help to you in job advancement, are you upgrading your current skills or retraining in a new area of skills?			
	1) upgrading current skills	58%	52%
	2) retraining in new area	42%	48%

		MALE	FEMALE
49.	If you hope with the help of continuing education to get a new or different job, how would you describe that occupation?		
	1) Professional/technical	41%	66%
	2) Managerial/administrative	31%	12%
	3) Clerical	11%	5%
	4) Sales	2%	2%
	5) Craftsman	2%	1%
	6) Operative	1%	--
	7) Laborer	--	--
	8) Service Worker	--	--
	9) Protective Service Worker	10%	1%
	10) Am not looking for new job	12%	14%
50.	If you feel this course or program will be of help to you in job advancement, how much of a yearly increase in salary do you expect?		
	1) no salary increase	17%	22%
	2) $100-299	5%	10%
	3) $300-499	6%	10%
	4) $500-749	9%	11%
	5) $750-999	8%	6%
	6) $1000-1499	15%	12%
	7) $1500-2000	12%	7%
	8) more than $2000	29%	23%
51.	What is the fee you are paying for this course?		
	1) no fee	4%	9%
	2) under $35	7%	9%
	3) $36-50	8%	3%
	4) $51-75	36%	40%
	5) $76-100	27%	12%
	6) $101-125	8%	11%
	7) $126-149	4%	3%
	8) $150-200	6%	11%
	9) more than $200	1%	3%
52.	What is the highest price you would be willing to pay for this course?		
	1) no fee	6%	4%
	2) under $35	8%	7%
	3) $36-50	9%	8%
	4) $51-75	32%	36%
	5) $76-100	16%	27%
	6) $101-125	8%	8%
	7) $126-149	5%	4%
	8) $150-200	11%	6%
	9) more than $200	5%	1%
53.	Are you being reimbursed either in part or in full for taking your present course work?		
	1) yes, reimbursed	59%	24%
	2) no, not reimbursed	41%	76%

		MALE	FEMALE
54.	If you are reimbursed in part or in full, by whom?		
	1) Government employer	14%	10%
	2) Private employer	40%	54%
	3) State Agency	3%	2%
	4) Federal Agency	8%	4%
	5) Financial aid or subsidy from institution	2%	11%
	6) Veteran's subsidy	36%	5%
	7) Teacher voucher	2%	10%
55.	Was the price of tuition something you considered in making your decision to enroll?		
	1) yes	34%	44%
	2) no	66%	56%
56.	If you are being reimbursed in part or in full, would you enroll in this course if you had to pay the entire cost yourself?		
	1) yes	71%	78%
	2) no	29%	23%
57.	Would you take more courses if they were less expensive?		
	1) yes	45%	61%
	2) no	55%	39%
58.	If you would favor heavier concentration of hours in certain times, what would they be?		
	1) morning	19%	28%
	2) afternoon	14%	17%
	3) evening	55%	44%
	4) weekends	12%	11%
59.	Do you plan to take more courses in the next term?		
	1) yes	77%	80%
	2) no	23%	20%
60.	If you do not plan to take more courses, what is your reason?		
	1) am moving from area	13%	14%
	2) courses too costly	12%	14%
	3) no interest in other courses	17%	15%
	4) have completed requirements for degree	30%	29%
	5) personal reasons	23%	26%
	6) do not like the course	2%	1%
	7) too far to drive	2%	1%
	8) have used up veterans or teachers subsidy	2%	1%

		MALE	FEMALE
61.	What is the main reason why you are taking this course at this particular institution and nowhere else?		
	1) only institution offering program in the area	24%	20%
	2) cost lower at this school	17%	25%
	3) closer to home or office	33%	35%
	4) time offered more convenient	12%	10%
	5) quality of instruction higher	13%	9%
	6) parking adequate	1%	1%

IV. In the following section, questions were asked about reactions to possible changes in current programs across the state.

		MALE	FEMALE
62.	Are you interested or do you think more courses should be offered across the state in continuing education which are academic?		
	1) no, I think programs are adequate currently	20%	15%
	2) yes, I would be interested in new programs for my own use	51%	57%
	3) yes, although I would not use new programs, I think they should be offered to others	29%	28%
63.	.... trade or technical?		
	1) no, programs adequate	16%	11%
	2) yes, would use personally	39%	25%
	3) yes, for use of others	45%	65%
64.	.... business-oriented?		
	1) no, programs adequate	24%	22%
	2) yes, would use personally	42%	23%
	3) yes, for use of others	34%	55%
65.	.... professional or at the graduate level?		
	1) no, programs adequate	19%	12%
	2) yes, would use personally	57%	60%
	3) yes, for use of others	24%	28%
66.	.... social and community service subjects?		
	1) no, programs adequate	25%	15%
	2) yes, would use personally	36%	50%
	3) yes, for use of others	39%	36%
67.	.... arts and crafts, culture or personal interest subjects?		
	1) no, programs adequate	29%	20%
	2) yes, would use personally	33%	51%
	3) yes, for use of others	38%	29%

	MALE	FEMALE
68. Would you prefer to take a course with a longer class hour at each meeting, such as a full day on a weekend but with fewer class meetings?		
1) no, programs adequate	72%	72%
2) yes, would use personally	22%	22%
3) yes, for use of others	6%	6%
69. Are you interested in or do you think there is a need for more branch or local campuses to be opened?		
1) no, programs adequate	38%	38%
2) yes, would use personally	45%	44%
3) yes, for use of others	17%	18%
70. Are you interested in or do you think there is a need for an "open university" (expanded home television and correspondence program)?		
1) no, programs adequate	34%	42%
2) yes, would use personally	41%	41%
3) yes, for use of others	17%	26%
71. Are you interested in or do you think there is a need to have courses in your work place?		
1) no, programs adequate	42%	43%
2) yes, would use personally	27%	41%
3) yes, for use of others	11%	17%
72. Do you think there is a need to have courses that give credit for experience outside the classroom?		
1) no, programs adequate	16%	11%
2) yes, would use personally	71%	73%
3) yes, for use of others	12%	16%
73. Do you feel greater counselling services are needed where educational alternatives and opportunities as well as problems can be discussed?		
1) no, programs adequate	22%	14%
2) yes, would use personally	61%	67%
3) yes, for use of others	17%	19%
74. If you are married, would you be interested in bringing your family together to a center where a variety of children's and adult's programs would be offered separately but at the same time and in the same building?		
1) no, programs adequate	25%	16%
2) yes, would use personally	55%	59%
3) yes, for use of others	19%	26%

III.A.6. Responses of Students in Public and Private Institutions: Simple Frequency Distributions

I. In the following section questions were asked about students and their background.

Question:		PUBLIC	PRIVATE
1. What is your age as of this day?			
	1) under 25	35%	28%
	2) 25-29	27%	31%
	3) 30-34	15%	20%
	4) 35-44	14%	15%
	5) over 44	9%	6%
2. What is your sex?	1) male	59%	76%
	2) female	41%	24%
3. How would you describe yourself?			
	1) Black or Negro	3%	4%
	2) Oriental or Asian	-	2%
	3) Puerto-Rican or Spanish	1%	1%
	4) White or Caucasian	94%	91%
	5) Other	2%	3%
4. Were you born or was your father born in a foreign country?			
	1) no, native born	81%	78%
	2) yes, father foreign-born	16%	15%
	3) yes, both foreign-born	3%	6%
5. What is your marital status?			
	1) single	37%	37%
	2) married - spouse present	60%	61%
	3) married - spouse absent	3%	6%
6. Do you have any children living at home or away at school but still dependent on you?			
	1) no	51%	54%
	2) yes, one	13%	14%
	3) yes, two	17%	16%
	4) yes, three to five	17%	15%
	5) yes, more than five	2%	2%
7. What is the highest grade or year of school you ever attended?			
	1) less than 12 years	4%	2%
	2) 12 years	20%	13%
	3) 1 year of college	13%	11%
	4) 2 years of college	16%	19%
	5) 3 years of college	7%	19%
	6) 4 years of college	11%	15%
	7) graduate or professional	24%	22%

	PUBLIC	PRIVATE
8. What is the highest degree you ever attained?		
1) no degree	4%	1%
2) high school diploma	44%	38%
3) certificate at post-secondary level	10%	11%
4) A.A. degree	9%	17%
5) B.S. or B.A. degree	24%	24%
6) M.A. degree	6%	3%
7) Ph.D. or Ed.D	-	-
8) M.B.A. or D.B.A.	-	1%
9) L.L.B. or J.D.	-	1%
10) other professional degree	3%	4%
9. What is the highest level of schooling your father attained?		
1) 1-8 years	23%	19%
2) 9-11 years	17%	16%
3) 12 years	29%	31%
4) 1 year of college	4%	4%
5) 2 years of college	7%	7%
6) 3 years of college	1%	1%
7) 4 years of college	8%	9%
8) graduate or professional school	7%	9%
9) don't know	5%	5%
10. What is the highest level of schooling your mother attained?		
1) 1-8 years	18%	15%
2) 9-11 years	17%	14%
3) 12 years	40%	44%
4) 1 year of college	4%	4%
5) 2 years of college	7%	7%
6) 3 years of college	1%	2%
7) 4 years of college	5%	6%
8) graduate or professional school	4%	5%
9) don't know	4%	3%
11. What is your employment status (job for pay) as of this week?		
1) working outside the home	78%	80%
2) looking for work	2%	2%
3) not working outside the home	20%	18%
For those having or looking for jobs:		
12. Does the job you have/had or are looking for involve?		
1) full-time work	81%	85%
2) more than half, but less than full-time work	12%	8%
3) less than half-time work	8%	7%

	PUBLIC	PRIVATE
13. How would you best describe the kind of work that you do? (did)?		
1) Professional/technical	47%	45%
2) Managerial/administrative	11%	21%
3) Clerical	14%	11%
4) Sales	4%	4%
5) Craftsman	5%	5%
6) Operative	3%	2%
7) Laborer	3%	2%
8) Service Worker	4%	3%
9) Protective Service Worker	9%	6%
14. What kind of business or industry do (did) you work in?		
1) agriculture	1%	1%
2) manufacturing	17%	28%
3) construction	4%	6%
4) transportation and public utilities	5%	7%
5) wholesale, retail trade	9%	8%
6) finance, insurance and real estate	5%	9%
7) business and personal services	9%	10%
8) professional services	38%	22%
9) federal government	4%	4%
10) local or state government	9%	7%
15. What is or was your father's occupation?		
1) Professional/technical	16%	16%
2) Managerial/administrative	17%	22%
3) Clerical	4%	3%
4) Sales	7%	7%
5) Craftsman	23%	23%
6) Operative	13%	11%
7) Laborer	11%	10%
8) Service Worker	5%	4%
9) Protective Service Worker	7%	5%
16. What is or was your mother's occupation?		
1) Professional/technical	14%	14%
2) Managerial/administrative	5%	4%
3) Clerical	21%	22%
4) Sales	5%	6%
5) Craftsman	3%	2%
6) Operative	6%	5%
7) Laborer	2%	2%
8) Service Worker	7%	7%
9) Protective Service Worker	-	-
10) Housewife -- never worked outside the home	36%	39%

BEST COPY AVAILABLE

		PUBLIC	PRIVATE
For those who are now or ever were married:			
17.	What was the highest level of schooling your spouse attained?		
1)	less than 12 years	10%	8%
2)	12 years	34%	34%
3)	1 year of college	11%	10%
4)	2 years of college	10%	14%
5)	3 years of college	5%	6%
6)	4 years of college	15%	14%
7)	graduate or professional school	16%	14%
18.	What is the employment status of your spouse as of this week?		
1)	working outside the home	56%	50%
2)	looking for work	2%	2%
3)	not working outside the home	42%	48%
19.	If your spouse has or is looking for a job, or had a job outside the home, does (did) the job involve:		
1)	full-time work	70%	64%
2)	more than half, but less than full-time work	8%	7%
3)	less than half-time work	15%	20%
4)	never worked outside home	7%	9%
20.	How would you describe the work that your spouse does (did)?		
1)	Professional/technical	34%	34%
2)	Managerial/administrative	11%	9%
3)	Clerical	23%	35%
4)	Sales	7%	6%
5)	Craftsman	7%	3%
6)	Operative	5%	3%
7)	Laborer	2%	1%
8)	Service Worker	4%	3%
9)	Protective Service Worker	2%	1%
10)	Never worked outside home	5%	7%
21.	What kind of business or industry does (or did) your spouse work in?		
1)	agriculture	3%	1%
2)	manufacturing	16%	12%
3)	construction	5%	2%
4)	transportation and public utilities	5%	6%
5)	wholesale and retail trade	10%	11%
6)	finance, insurance and real estate	8%	12%
7)	business and personal services	13%	13%

		PUBLIC	PRIVATE
21.	cont.		
	8) professional services	30%	33%
	9) government	5%	5%
	10) never worked outside home	5%	6%
22.	What was your income in 1972?		
	1) no income	8%	5%
	2) under $5,000	24%	21%
	3) $5-7,000	11%	8%
	4) $7-8,000	8%	6%
	5) $8-10,000	16%	14%
	6) $10-15,000	25%	33%
	7) $15-25,000	8%	14%
	8) over $25,000	1%	2%
23.	What was your total family income in 1972? Please mark 1) if living at home with parents.		
	1) at home with parents	23%	20%
	2) under $5,000	6%	5%
	3) $5-7,000	4%	3%
	4) $7-8,000	4%	3%
	5) $8-10,000	10%	7%
	6) $10-15,000	28%	28%
	7) $15-25,000	23%	28%
	8) over $25,000	4%	7%
24.	Did you ever or do you now serve in the Armed Forces?		
	1) never served	63%	56%
	2) veteran Armed Forces	33%	40%
	3) now serving in Armed Forces	3%	4%

II. In the following section questions were asked about participation in continuing education.

25.	In what subject area or type of program are you currently enrolled?		
	1) Regular academic subjects	34%	26%
	2) Trade and industrial	2%	3%
	3) Technical	6%	10%
	4) Business	15%	25%
	5) Professional	15%	29%
	6) Social or community service	23%	5%
	7) Arts and crafts	1%	1%
	8) Family and personal skills	2%	-
	9) Cultural or personal interest	2%	1%
26.	What is your status as a student?		
	1) enrolled in continuing education or evening division only	89%	78%

		PUBLIC	PRIVATE
26.	cont.		
	2) enrolled full or part-time in regular day program of this institution	8%	20%
	3) enrolled full or part-time in regular day program of another institution	3%	2%
27.	What day of the week does this class meet? If more than once a week, mark this day only.		
	1) Monday	25%	26%
	2) Tuesday	23%	17%
	3) Wednesday	19%	25%
	4) Thursday	27%	21%
	5) Friday	2%	4%
	6) Saturday	4%	6%
	7) Sunday	-	1%
28.	At what hour of the day does this class begin?		
	1) before noon	6%	12%
	2) 12-3:00 p.m.	3%	2%
	3) 3-4:00 p.m.	1%	1%
	4) 4-5:00 p.m.	16%	4%
	5) 5-6:00 p.m.	1%	11%
	6) 6-7:00 p.m.	27%	43%
	7) 7-8:00 p.m.	45%	21%
	8) 8-9:00 p.m.	1%	6%
	9) 9:00 p.m. or later	1%	1%
29.	Is this course offered as a credit course?		
	1) yes, credit course	95%	97%
	2) no, non-credit course	5%	3%
30.	Are you taking this course for credit?		
	1) yes, for one or two credits	10%	38%
	2) yes, for three credits	78%	45%
	3) yes, for four or more credits	6%	12%
	4) no, not for credit	6%	5%
31.	How many courses are you taking currently in continuing education?		
	1) this course only	37%	22%
	2) two courses	38%	35%
	3) three courses	16%	21%
	4) four courses	9%	22%
32.	How many hours a week do you spend in study for this class (do not include class time)?		
	1) less than 2 hours	29%	25%
	2) 2-4 hours	36%	40%
	3) 4-6 hours	25%	24%
	4) 7-10 hours	7%	8%
	5) over 10 hours	3%	4%

	PUBLIC	PRIVATE
33. How many students are there in this class?		
1) less than 5 students	1%	1%
2) 5-10 students	4%	8%
3) 11-15 students	12%	18%
4) 16-20 students	19%	20%
5) 21-30 students	36%	35%
6) more than 30 students	28%	18%
34. How does your taking this class fit into your daily routine?		
1) class directly from work	19%	36%
2) leave work, go home, class	45%	29%
3) leave work, eat out, class	7%	10%
4) class before work	6%	4%
5) class from home	24%	22%
35. How did you get to class this week?		
1) Driver, private auto	81%	77%
2) Passenger, private auto	13%	7%
3) bus or street car	1%	5%
4) subway	1%	5%
5) taxicab	1%	-
6) walked	3%	7%
36. How far in miles is your present residency away from this class?		
1) 0-5 miles	30%	28%
2) 5-10 miles	23%	22%
3) 10-15 miles	16%	16%
4) 15-20 miles	13%	10%
5) 20-30 miles	12%	13%
6) more than 30 miles	7%	11%
37. Is this class held in the main campus of the institution or a branch campus?		
1) main campus	88%	74%
2) branch campus	11%	24%
3) work place	1%	2%
38. How long does it take you to get home from this course?		
1) less than 10 minutes	17%	15%
2) 10-15 minutes	20%	16%
3) 16-20 minutes	17%	16%
4) 21-30 minutes	23%	22%
5) 31-45 minutes	16%	19%
6) 26-60 minutes	5%	9%
7) more than an hour	2%	4%

III. In the following section questions were asked about motivations for enrolling in the course.

39. Where did you first hear about the course or program you are taking?

		PUBLIC	PRIVATE
1)	through own search of schools in area	47%	55%
2)	from family	5%	4%
3)	from friends	16%	15%
4)	at work	14%	15%
5)	from job or employment counsellor	3%	3%
6)	newspaper or brochure	15%	8%
7)	radio	-	-
8)	television	-	-

40. Why are you taking this course in the continuing education division and not in the regular day program?

1)	applied to day and was not accepted	3%	1%
2)	taking to transfer credit to day program	10%	5%
3)	convenience of hours	67%	78%
4)	course offered only in continuing education	15%	11%
5)	open enrollment in continuing education	4%	5%

41. Which of the following would you say best describes the reason you are participating in continuing education?

1)	for general information	9%	9%
2)	to improve or advance in job	56%	60%
3)	to get a new job	22%	18%
4)	for community activity	1%	1%
5)	for personal or family interests	11%	11%
6)	for social or recreational interests	1%	1%

42. Are you taking courses to satisfy requirements for any one of the following degree programs?

1)	Certificate or 1 yr. diploma	3%	2%
2)	Associate or 2 yr. degree	33%	14%
3)	Bachelor's or 3 yr. degree	24%	47%
4)	Master's degree	19%	10%
5)	Ph.D. or Ed.D.	1%	1%
6)	M.B.A. or D.B.A.	1%	12%
7)	L.L.B. or J.D.	-	2%
8)	Other professional degree	3%	2%
9)	no, not degree candidate	19%	10%

BEST COPY AVAILABLE

	PUBLIC	PRIVATE
43. If you are not now contemplating a degree or certificate, is your reason because that degree is not now being offered at an institution accessible to you?		
1) yes, because not offered	18%	11%
2) no, not that reason	82%	89%
44. If yes to above, what degree or certificate would you like to see offered?		
1) Certificate or 1 yr. diploma	13%	12%
2) Associate or 2 yr. degree	17%	17%
3) Bachelor's or 3 yr. degree	21%	23%
4) Master's degree	11%	11%
5) Ph.D. or Ed.D.	6%	4%
6) M.B.A. or D.B.A.	2%	6%
7) L.L.B. or J.D.	2%	2%
8) Other professional degree	5%	7%
9) no, not degree candidate	24%	18%
45. Is your program of courses a continuation in the same subject area as your last full-time educational experience or in a different subject area?		
1) same subject area	46%	47%
2) different subject area	54%	53%
46. When you discontinued your education as a full-time student in the past, what was your main reason for doing so?		
1) still full-time student	9%	12%
2) lack of adequate financial resources	23%	26%
3) poor academic record	7%	6%
4) serve in armed forces	10%	13%
5) marriage	13%	10%
6) dissatisfaction with school	10%	11%
7) other personal reasons	29%	23%
47. Are you taking your program of courses for job advancement? If yes, what best describes your reason?		
1) no, not for job advancement	32%	25%
2) yes, employer requires	9%	5%
3) yes, I feel it is necessary	54%	66%
4) yes, to take licensing exam	6%	4%
For those taking the course for job advancement:		
48. If you feel this course will be of help to you in job advancement, are you upgrading your current skills or retraining in a new area of skills?		
1) upgrading current skills	54%	57%
2) retraining in new area	46%	43%

49. If you hope with the help of continuing education to get a new or different job, how would you describe that occupation?

	PUBLIC	PRIVATE
1) Professional/technical	50%	43%
2) Managerial/administrative	20%	35%
3) Clerical	4%	1%
4) Sales	2%	1%
5) Craftsman	1%	2%
6) Operative	1%	1%
7) Laborer	-	-
8) Service Worker	-	-
9) Protective Service Worker	8%	6%
10) Am not looking for new job	14%	10%

50. If you feel this course or program will be of help to you in job advancement, how much of a yearly increase in salary do you expect?

	PUBLIC	PRIVATE
1) no salary increase	18%	18%
2) $100-299	8%	5%
3) $300-499	12%	4%
4) $500-749	11%	7%
5) $750-999	9%	5%
6) $1000-1499	14%	14%
7) $1500-2000	8%	13%
8) more than $2000	22%	34%

51. What is the fee you are paying for this course?

	PUBLIC	PRIVATE
1) no fee	8%	7%
2) under $35	11%	2%
3) $36-50	6%	2%
4) $51-75	48%	30%
5) $76-100	23%	4%
6) $101-125	2%	21%
7) $126-149	1%	6%
8) $150-200	-	22%
9) more than $200	-	6%

52. What is the highest price you would be willing to pay for this course?

	PUBLIC	PRIVATE
1) no fee	7%	6%
2) under $35	11%	4%
3) $36-50	10%	6%
4) $51-75	37%	25%
5) $76-100	26%	9%
6) $101-125	4%	14%
7) $126-149	2%	8%
8) $150-200	1%	21%
9) more than $200	1%	7%

53. Are you being reimbursed either in part or in full for taking your present course work?

	PUBLIC	PRIVATE
1) yes, reimbursed	38%	61%
2) no, not reimbursed	63%	[illegible]9%

	PUBLIC	PRIVATE
54. If you are reimbursed in part or in full, by whom?		
1) Government employer	16%	8%
2) Private employer	29%	53%
3) State Agency	5%	2%
4) Federal Agency	8%	7%
5) Financial aid or subsidy from institution	2%	5%
6) Veteran's subsidy	34%	26%
7) Teacher voucher	6%	1%
55. Was the price of tuition something you considered in making your decision to enroll?		
1) yes	44%	27%
2) no	56%	73%
56. If you are being reimbursed in part or in full, would you enroll in this course if you had to pay the entire cost yourself?		
1) yes	75%	68%
2) no	25%	32%
57. Would you take more courses if they were less expensive?		
1) yes	54%	45%
2) no	46%	55%
58. If you would favor heavier concentration of hours in certain times, what would they be?		
1) morning	23%	24%
2) afternoon	16%	14%
3) evening	49%	51%
4) weekends	11%	12%
59. Do you plan to take more courses in the next term?		
1) yes	81%	74%
2) no	19%	26%
60. If you do not plan to take more courses, what is your reason?		
1) am moving from area	21%	12%
2) courses too costly	15%	10%
3) no interest in other courses	17%	13%
4) have completed requirements for degree	21%	38%
5) personal reasons	22%	22%
6) do not like the course	1%	2%
7) too far to drive	2%	2%
8) have used up veterans or teachers subsidy	1%	2%

		PUBLIC	PRIVATE
61.	What is the main reason why you are taking this course at this particular institution and nowhere else?		
	1) only institution offering program in the area	22%	24%
	2) cost lower at this school	26%	11%
	3) closer to home or office	37%	27%
	4) time offered more convenient	8%	15%
	5) quality of instruction higher	7%	20%
	6) parking adequate	1%	2%

IV. In the following section, questions were asked about reactions to possible changes in current programs across the state.

		PUBLIC	PRIVATE
62.	Are you interested or do you think more courses should be offered across the state in continuing education which are academic?		
	1) no, I think programs are adequate currently	19%	20%
	2) yes, I would be interested in new programs for my own use	54%	49%
	3) yes, although I would not use new programs, I think they should be offered to others	27%	31%
63.	.... trade or technical?		
	1) no, programs adequate	15%	16%
	2) yes, would use personally	33%	35%
	3) yes, for use of others	52%	50%
64.	.... business-oriented?		
	1) no, programs adequate	22%	25%
	2) yes, would use personally	32%	42%
	3) yes, for use of others	46%	34%
65.	.... professional or at the graduate level?		
	1) no, programs adequate	15%	19%
	2) yes, would use personally	60%	56%
	3) yes, for use of others	25%	25%
66.	.... social and community service subjects?		
	1) no, programs adequate	23%	24%
	2) yes, would use personally	43%	35%
	3) yes, for use of others	34%	44%
67.	.... arts and crafts, culture or personal interest subjects?		
	1) no, programs adequate	25%	28%
	2) yes, would use personally	42%	36%
	3) yes, for use of others	34%	37%

Question	Response	PUBLIC	PRIVATE
68. Would you prefer to take a course with a longer class hour at each meeting, such as a full day on a weekend but with fewer class meetings?			
	1) no, programs adequate	72%	72%
	2) yes, would use personally	22%	22%
	3) yes, for use of others	6%	6%
69. Are you interested in or do you think there is a need for more branch or local campuses to be opened?			
	1) no, programs adequate	38%	37%
	2) yes, would use personally	46%	44%
	3) yes, for use of others	16%	19%
70. Are you interested in or do you think there is a need for an "open university" (expanded home television and correspondence program)?			
	1) no, programs adequate	38%	40%
	2) yes, would use personally	42%	39%
	3) yes, for use of others	20%	21%
71. Are you interested in or do you think there is a need to have courses in your work place?			
	1) no, programs adequate	44%	41%
	2) yes, would use personally	43%	47%
	3) yes, for use of others	41%	12%
72. Do you think there is a need to have courses that give credit for experience outside the classroom?			
	1) no, programs adequate	14%	15%
	2) yes, would use personally	73%	70%
	3) yes, for use of others	14%	14%
73. Do you feel greater counselling services are needed where educational alternatives and opportunities as well as problems can be discussed?			
	1) no, programs adequate	20%	18%
	2) yes, would use personally	61%	63%
	3) yes, for use of others	19%	19%
74. If you are married, would you be interested in bringing your family together to a center where a variety of children's and adult's programs would be offered separately but at the same time and in the same building?			
	1) no, programs adequate	22%	25%
	2) yes, would use personally	58%	54%
	3) yes, for use of others	20%	21%

III.A.7. Responses of Students in Two Year and Four Year Institutions: Simple Frequency Distributions

I. In the following section questions were asked about students and their background.

Question:		**Two-Year**	**Four-Year**
1. What is your age as of this day?			
	1) under 25	38%	29%
	2) 25-29	23%	31%
	3) 30-34	15%	18%
	4) 35-44	14%	15%
	5) over 44	10%	7%
2. What is your sex?	1) male	66%	66%
	2) female	34%	34%
3. How would you describe yourself?			
	1) Black or Negro	3%	3%
	2) Oriental or Asian	1%	1%
	3) Puerto-Rican or Spanish	1%	1%
	4) White or Caucasian	93%	93%
	5) Other	2%	2%
4. Were you born or was your father born in a foreign country?			
	1) no, native born	81%	80%
	2) yes, father foreign-born	15%	16%
	3) yes, both foreign-born	4%	5%
5. What is your marital status?			
	1) single	38%	36%
	2) married - spouse present	60%	62%
	3) married - spouse absent	3%	2%
6. Do you have any children living at home or away at school but still dependent on you?			
	1) no	50%	53%
	2) yes, one	13%	13%
	3) yes, two	18%	17%
	4) yes, three to five	18%	15%
	5) yes, more than five	2%	2%
7. What is the highest grade or year of school you ever attended?			
	1) less than 12 years	7%	2%
	2) 12 years	32%	10%
	3) 1 year of college	28%	9%
	4) 2 years of college	20%	15%
	5) 3 years of college	5%	15%
	6) 4 years of college	4%	17%
	7) graduate or professional	4%	32%

	Two-Year	Four-Year
8. What is the highest degree you ever attained?		
1) no degree	6%	2%
2) high school diploma	63%	30%
3) certificate at post-secondary level	14%	9%
4) A.A. degree	8%	14%
5) B.S. or B.A. degree	5%	34%
6) M.A. degree	1%	7%
7) Ph.D. or Ed.D	-	-
8) M.B.A. or D.B.A.	-	1%
9) L.L.B. or J.D.	-	-
10) other professional degree	3%	4%
9. What is the highest level of schooling your father attained?		
1) 1-8 years	24%	20%
2) 9-11 years	17%	16%
3) 12 years	30%	30%
4) 1 year of college	3%	4%
5) 2 years of college	6%	7%
6) 3 years of college	1%	1%
7) 4 years of college	7%	9%
8) graduate or professional school	5%	9%
9) don't know	7%	4%
10. What is the highest level of schooling your mother attained?		
1) 1-8 years	19%	16%
2) 9-11 years	17%	15%
3) 12 years	41%	42%
4) 1 year of college	3%	5%
5) 2 years of college	5%	7%
6) 3 years of college	2%	1%
7) 4 years of college	4%	6%
8) graduate or professional school	4%	5%
9) don't know	5%	3%
11. What is your employment status (job for pay) as of this week?		
1) working outside the home	79%	78%
2) looking for work	2%	2%
3) not working outside the home	19%	20%
For those having or looking for jobs:		
12. Does the job you have/had or are looking for involve?		
1) full-time work	80%	84%
2) more than half, but less than full-time work	12%	9%
3) less than half-time work	8%	7%

		Two-Year	Four-Year
13. How would you best describe the kind of work that you do? (did)?			
	1) Professional/technical	27%	56%
	2) Managerial/administrative	11%	17%
	3) Clerical	17%	11%
	4) Sales	6%	4%
	5) Craftsman	9%	3%
	6) Operative	5%	1%
	7) Laborer	4%	2%
	8) Service Worker	5%	3%
	9) Protective Service Worker	16%	3%
14. What kind of business or industry do (did) you work in?			
	1) agriculture	1%	1%
	2) manufacturing	22%	22%
	3) construction	6%	4%
	4) transportation and public utilities	7%	5%
	5) wholesale, retail trade	11%	7%
	6) finance, insurance and real estate	6%	7%
	7) business and personal services	9%	9%
	8) professional services	20%	37%
	9) federal government	4%	4%
	10) local or state government	13%	5%
15. What is or was your father's occupation?			
	1) Professional/technical	13%	17%
	2) Managerial/administrative	16%	20%
	3) Clerical	3%	3%
	4) Sales	6%	7%
	5) Craftsman	24%	22%
	6) Operative	15%	11%
	7) Laborer	12%	9%
	8) Service Worker	4%	5%
	9) Protective Service Worker	7%	6%
16. What is or was your mother's occupation?			
	1) Professional/technical	14%	14%
	2) Managerial/administrative	5%	5%
	3) Clerical	19%	22%
	4) Sales	5%	6%
	5) Craftsman	3%	2%
	6) Operative	7%	6%
	7) Laborer	2%	2%
	8) Service Worker	9%	7%
	9) Protective Service Worker	-	-
	10) Housewife -- never worked outside the home	37%	37%

For those who are now or ever were married:

		Two-Year	Four-Year
17.	What was the highest level of schooling your spouse attained?		
	1) less than 12 years	12%	7%
	2) 12 years	43%	30%
	3) 1 year of college	11%	10%
	4) 2 years of college	11%	12%
	5) 3 years of college	5%	7%
	6) 4 years of college	10%	17%
	7) graduate or professional school	8%	19%
18.	What is the employment status of your spouse as of this week?		
	1) working outside the home	54%	53%
	2) looking for work	3%	2%
	3) not working outside the home	43%	45%
19.	If your spouse has or is looking for a job, or had a job outside the home, does (did) the job involve:		
	1) full-time work	64%	69%
	2) more than half, but less than full-time work	9%	7%
	3) less than half-time work	17%	16%
	4) never worked outside home	10%	7%
20.	How would you describe the work that your spouse does (did)?		
	1) Professional/technical	27%	38%
	2) Managerial/administrative	10%	10%
	3) Clerical	27%	28%
	4) Sales	7%	6%
	5) Craftsman	8%	4%
	6) Operative	7%	3%
	7) Laborer	3%	1%
	8) Service Worker	4%	3%
	9) Protective Service Worker	2%	1%
	10) Never worked outside home	7%	5%
21.	What kind of business or industry does (or did) your spouse work in?		
	1) agriculture	2%	2%
	2) manufacturing	17%	13%
	3) construction	6%	3%
	4) transportation and public utilities	6%	5%
	5) wholesale and retail trade	10%	10%
	6) finance, insurance and real estate	9%	10%
	7) business and personal services	14%	12%

21. cont.

		Two-Year	Four-Year
8)	professional services	25%	35%
9)	government	5%	5%
10)	never worked outside home	7%	5%

22. What was your income in 1972?

		Two-Year	Four-Year
1)	no income	7%	7%
2)	under $5,000	25%	20%
3)	$5-7,000	13%	8%
4)	$7-8,000	7%	7%
5)	$8-10,000	14%	16%
6)	$10-15,000	26%	30%
7)	$15-25,000	7%	12%
8)	over $25,000	1%	1%

23. What was your total family income in 1972? Please mark 1) if living at home with parents.

		Two-Year	Four-Year
1)	at home with parents	26%	19%
2)	under $5,000	5%	6%
3)	$5-7,000	5%	3%
4)	$7-8,000	3%	3%
5)	$8-10,000	10%	8%
6)	$10-15,000	27%	28%
7)	$15-25,000	20%	27%
8)	over $25,000	4%	6%

24. Did you ever or do you now serve in the Armed Forces?

		Two-Year	Four-Year
1)	never served	57%	62%
2)	veteran Armed Forces	39%	34%
3)	now serving in Armed Forces	3%	4%

II. In the following section questions were asked about participation in continuing education.

25. In what subject area or type of program are you currently enrolled?

		Two-Year	Four-Year
1)	Regular academic subjects	31%	31%
2)	Trade and industrial	5%	1%
3)	Technical	10%	7%
4)	Business	22%	18%
5)	Professional	21%	21%
6)	Social or community service	7%	20%
7)	Arts and crafts	2%	1%
8)	Family and personal skills	1%	1%
9)	Cultural or personal interest	1%	2%

26. What is your status as a student?

		Two-Year	Four-Year
1)	enrolled in continuing education or evening division only	89%	83%

	Two-Year	Four-Year
26. cont.		
2) enrolled full or part-time in regular day program of this institution	8%	15%
3) enrolled full or part-time in regular day program of another institution	3%	1%
27. What day of the week does this class meet? If more than once a week, mark this day only.		
1) Monday	32%	23%
2) Tuesday	16%	22%
3) Wednesday	16%	24%
4) Thursday	28%	23%
5) Friday	3%	3%
6) Saturday	4%	5%
7) Sunday	1%	-
28. At what hour of the day does this class begin?		
1) before noon	7%	9%
2) 12-3:00 p.m.	4%	2%
3) 3-4:00 p.m.	1%	1%
4) 4-5:00 p.m.	-	16%
5) 5-6:00 p.m.	2%	7%
6) 6-7:00 p.m.	50%	26%
7) 7-8:00 p.m.	34%	36%
8) 8-9:00 p.m.	1%	4%
9) 9:00 p.m. or later	1%	1%
29. Is this course offered as a credit course?		
1) yes, credit course	89%	99%
2) no, non-credit course	11%	1%
30. Are you taking this course for credit?		
1) yes, for one or two credits	11%	26%
2) yes, for three credits	67%	64%
3) yes, for four or more credits	9%	8%
4) no, not for credit	13%	2%
31. How many courses are you taking currently in continuing education?		
1) this course only	36%	29%
2) two courses	38%	36%
3) three courses	16%	19%
4) four courses	10%	16%
32. How many hours a week do you spend in study for this class (do not include class time)?		
1) less than 2 hours	25%	28%
2) 2-4 hours	36%	38%
3) 4-6 hours	28%	23%
4) 7-10 hours	8%	8%
5) over 10 hours	4%	3%

		Two-Year	Four-Year
33.	How many students are there in this class?		
	1) less than 5 students	1%	1%
	2) 5-10 students	5%	5%
	3) 11-15 students	15%	15%
	4) 16-20 students	20%	19%
	5) 21-30 students	34%	37%
	6) more than 30 students	26%	23%
34.	How does your taking this class fit into your daily routine?		
	1) class directly from work	14%	31%
	2) leave work, go home, class	48%	34%
	3) leave work, eat out, class	8%	9%
	4) class before work	8%	4%
	5) class from home	23%	23%
35.	How did you get to class this week?		
	1) Driver, private auto	83%	77%
	2) Passenger, private auto	11%	9%
	3) bus or street car	1%	3%
	4) subway	1%	3%
	5) taxicab	1%	1%
	6) walked	3%	5%
36.	How far in miles is your present residency away from this class?		
	1) 0-5 miles	35%	26%
	2) 5-10 miles	25%	21%
	3) 10-15 miles	17%	16%
	4) 15-20 miles	11%	12%
	5) 20-30 miles	9%	14%
	6) more than 30 miles	3%	10%
37.	Is this class held in the main campus of the institution or a branch campus?		
	1) main campus	83%	82%
	2) branch campus	16%	17%
	3) work place	1%	1%
38.	How long does it take you to get home from this course?		
	1) less than 10 minutes	20%	14%
	2) 10-15 minutes	24%	15%
	3) 16-20 minutes	19%	16%
	4) 21-30 minutes	21%	23%
	5) 31-45 minutes	12%	20%
	6) 26-60 minutes	3%	9%
	7) more than an hour	1%	3%

III. In the following section questions were asked about motivations for enrolling in the course.

39. Where did you first hear about the course or program you are taking?

		Two-Year	Four-Year
1)	through own search of schools in area	40%	55%
2)	from family	5%	4%
3)	from friends	16%	16%
4)	at work	18%	13%
5)	from job or employment counsellor	4%	2%
6)	newspaper or brochure	17%	10%
7)	radio	-	-
8)	television	-	-

40. Why are you taking this course in the continuing education division and not in the regular day program?

		Two-Year	Four-Year
1)	applied to day and was not accepted	3%	2%
2)	taking to transfer credit to day program	11%	7%
3)	convenience of hours	69%	73%
4)	course offered only in continuing education	12%	14%
5)	open enrollment in continuing education	5%	5%

41. Which of the following would you say best describes the reason you are participating in continuing education?

		Two-Year	Four-Year
1)	for general information	10%	9%
2)	to improve or advance in job	54%	59%
3)	to get a new job	21%	20%
4)	for community activity	1%	1%
5)	for personal or family interests	13%	11%
6)	for social or recreational interests	1%	1%

42. Are you taking courses to satisfy requirements for any one of the following degree programs?

		Two-Year	Four-Year
1)	Certificate or 1 yr. diploma	3%	2%
2)	Associate or 2 yr. degree	57%	9%
3)	Bachelor's or 3 yr. degree	16%	41%
4)	Master's degree	2%	22%
5)	Ph.D. or Ed.D.	-	1%
6)	M.B.A. or D.B.A.	-	7%
7)	L.L.B. or J.D.	-	1%
8)	Other professional degree	2%	3%
9)	no, not degree candidate	19%	13%

	Two-Year	Four-Year
43. If you are not now contemplating a degree or certificate, is your reason because that degree is not now being offered at an institution accessible to you?		
1) yes, because not offered	16%	15%
2) no, not that reason	84%	85%
44. If yes to above, what degree or certificate would you like to see offered?		
1) Certificate or 1 yr. diploma	13%	12%
2) Associate or 2 yr. degree	22%	13%
3) Bachelor's or 3 yr. degree	27%	17%
4) Master's degree	5%	15%
5) Ph.D. or Ed.D.	2%	9%
6) M.B.A. or D.B.A.	2%	4%
7) L.L.B. or J.D.	2%	2%
8) Other professional degree	4%	7%
9) no, not degree candidate	24%	20%
45. Is your program of courses a continuation in the same subject area as your last full-time educational experience or in a different subject area?		
1) same subject area	46%	47%
2) different subject area	54%	53%
46. When you discontinued your education as a full-time student in the past, what was your main reason for doing so?		
1) still full-time student	9%	11%
2) lack of adequate financial resources	22%	25%
3) poor academic record	8%	6%
4) serve in armed forces	12%	10%
5) marriage	12%	11%
6) dissatisfaction with school	11%	9%
7) other personal reasons	26%	28%
47. Are you taking your program of courses for job advancement? If yes, what best describes your reason?		
1) no, not for job advancement.	33%	27%
2) yes, employer requires	4%	9%
3) yes, I feel it is necessary	56%	59%
4) yes, to take licensing exam	7%	4%
For those taking the course for job advancement:		
48. If you feel this course will be of help to you in job advancement, are you upgrading your current skills or retraining in a new area of skills?		
1) upgrading current skills	55%	56%
2) retraining in new area	45%	44%

		Two-Year	Four-Year
49.	If you hope with the help of continuing education to get a new or different job, how would you describe that occupation?		
	1) Professional/technical	37%	52%
	2) Managerial/administrative	23%	28%
	3) Clerical	5%	1%
	4) Sales	3%	1%
	5) Craftsman	2%	1%
	6) Operative	1%	1%
	7) Laborer	-	-
	8) Service Worker	1%	1%
	9) Protective Service Worker	15%	3%
	10) Am not looking for new job	12%	12%
50.	If you feel this course or program will be of help to you in job advancement, how much of a yearly increase in salary do you expect?		
	1) no salary increase	16%	19%
	2) $100-299	8%	6%
	3) $300-499	8%	8%
	4) $500-749	9%	10%
	5) $750-999	8%	7%
	6) $1000-1499	16%	13%
	7) $1500-2000	10%	10%
	8) more than $2000	25%	27%
51.	What is the fee you are paying for this course?		
	1) no fee	10%	6%
	2) under $35	6%	8%
	3) $36-50	6%	4%
	4) $51-75	60%	31%
	5) $76-100	7%	20%
	6) $101-125	6%	11%
	7) $126-149	2%	3%
	8) $150-200	3%	13%
	9) more than $200	1%	3%
52.	What is the highest price you would be willing to pay for this course?		
	1) no fee	6%	7%
	2) under $35	9%	8%
	3) $36-50	9%	8%
	4) $51-75	47%	25%
	5) $76-100	15%	22%
	6) $101-125	6%	9%
	7) $126-149	3%	5%
	8) $150-200	3%	12%
	9) more than $200	2%	4%
53.	Are you being reimbursed either in part or in full for taking your present course work?		
	1) yes, reimbursed	45%	48%
	2) no, not reimbursed	55%	52%

	Two-Year	Four-Year
54. If you are reimbursed in part or in full, by whom?		
1) Government employer	15%	10%
2) Private employer	33%	44%
3) State Agency	5%	2%
4) Federal Agency	11%	6%
5) Financial aid or subsidy from institution	2%	4%
6) Veteran's subsidy	33%	29%
7) Teacher voucher	1%	5%
55. Was the price of tuition something you considered in making your decision to enroll?		
1) yes	38%	38%
2) no	62%	62%
56. If you are being reimbursed in part or in full, would you enroll in this course if you had to pay the entire cost yourself?		
1) yes	75%	70%
2) no	25%	30%
57. Would you take more courses if they were less expensive?		
1) yes	53%	49%
2) no	47%	51%
58. If you would favor heavier concentration of hours in certain times, what would they be?		
1) morning	27%	22%
2) afternoon	13%	17%
3) evening	49%	50%
4) weekends	11%	12%
59. Do you plan to take more courses in the next term?		
1) yes	80%	77%
2) no	20%	23%
60. If you do not plan to take more courses, what is your reason?		
1) am moving from area	23%	15%
2) courses too costly	13%	13%
3) no interest in other courses	18%	14%
4) have completed requirements for degree	19%	32%
5) personal reasons	24%	21%
6) do not like the course	1%	2%
7) too far to drive	1%	2%
8) have used up veterans or teachers subsidy	1%	1%

	Two-Year	Four-Year
61. What is the main reason why you are taking this course at this particular institution and nowhere else?		
1) only institution offering program in the area	23%	23%
2) cost lower at this school	20%	20%
3) closer to home or office	37%	31%
4) time offered more convenient	10%	11%
5) quality of instruction higher	9%	13%
6) parking adequate	-	1%

IV. In the following section, questions were asked about reactions to possible changes in current programs across the state.

	Two-Year	Four-Year
62. Are you interested or do you think more courses should be offered across the state in continuing education which are academic?		
1) no, I think programs are adequate currently	19%	20%
2) yes, I would be interested in new programs for my own use	52%	52%
3) yes, although I would not use new programs, I think they should be offered to others	29%	28%
63. .... trade or technical?		
1) no, programs adequate	14%	16%
2) yes, would use personally	39%	31%
3) yes, for use of others	48%	53%
64. .... business-oriented?		
1) no, programs adequate	22%	24%
2) yes, would use personally	38%	35%
3) yes, for use of others	41%	41%
65. .... professional or at the graduate level?		
1) no, programs adequate	17%	17%
2) yes, would use personally	51%	62%
3) yes, for use of others	32%	21%
66. .... social and community service subjects?		
1) no, programs adequate	25%	22%
2) yes, would use personally	38%	41%
3) yes, for use of others	37%	37%
67. .... arts and crafts, culture or personal interest subjects?		
1) no, programs adequate	28%	25%
2) yes, would use personally	36%	41%
3) yes, for use of others	37%	34%

68. Would you prefer to take a course with a longer class hour at each meeting, such as a full day on a weekend but with fewer class meetings?

	Two-Year	Four-Year
1) no, programs adequate	71%	73%
2) yes, would use personally	23%	22%
3) yes, for use of others	7%	6%

69. Are you interested in or do you think there is a need for more branch or local campuses to be opened?

	Two-Year	Four-Year
1) no, programs adequate	37%	38%
2) yes, would use personally	46%	45%
3) yes, for use of others	17%	17%

70. Are you interested in or do you think there is a need for an "open university" (expanded home television and correspondence program)?

	Two-Year	Four-Year
1) no, programs adequate	40%	39%
2) yes, would use personally	41%	40%
3) yes, for use of others	19%	21%

71. Are you interested in or do you think there is a need to have courses in your work place?

	Two-Year	Four-Year
1) no, programs adequate	45%	41%
2) yes, would use personally	42%	46%
3) yes, for use of others	13%	13%

72. Do you think there is a need to have courses that give credit for experience outside the classroom?

	Two-Year	Four-Year
1) no, programs adequate	14%	15%
2) yes, would use personally	73%	71%
3) yes, for use of others	13%	14%

73. Do you feel greater counselling services are needed where educational alternatives and opportunities as well as problems can be discussed?

	Two-Year	Four-Year
1) no, programs adequate	23%	17%
2) yes, would use personally	58%	64%
3) yes, for use of others	19%	19%

74. If you are married, would you be interested in bringing your family together to a center where a variety of children's and adult's programs would be offered separately but at the same time and in the same building?

	Two-Year	Four-Year
1) no, programs adequate	25%	22%
2) yes, would use personally	53%	58%
3) yes, for use of others	22%	20%

BEST COPY AVAILABLE

III.A.8. Responses of Students in Community Colleges, State Colleges, Other Public, 2-Year Private and 4-Year Private Institutions: Simple Frequency Distributions

Question:		COMM. COLL.	STATE COLL.	OTHER PUBLIC	PRIVATE-2 yr.	PRIVATE-4 yr.
1. What is your age as of this day?						
	1) under 25	38%	29%	35%	37%	27%
	2) 25-29	[illegible]	32%	32%	30%	30%
	3) 30-34	15%	13%	20%	18%	20%
	4) 35-44	15%	16%	10%	11%	16%
	5) over 44	11%	9%	4%	4%	6%
2. What is your sex?	1) male	63%	50%	74%	89%	75%
	2) female	37%	50%	26%	11%	25%
3. How would you describe yourself?						
	1) Black or Negro	3%	2%	2%	7%	4%
	2) Oriental or Asian	-	-	-	1%	2%
	3) Puerto-Rican or Spanish	1%	1%	-	1%	1%
	4) White or Native American	93%	94%	95%	87%	92%
	5) Other	2%	2%	2%	4%	3%
4. Were you born or was your father born in a foreign country?						
	1) no, native born	81%	80%	83%	79%	78%
	2) yes, father foreign-born	15%	17%	14%	10%	16%
	3) yes, both foreign-born	3%	3%	3%	11%	6%
5. What is your marital status?						
	1) single	38%	37%	29%	40%	37%
	2) married - spouse present	59%	60%	68%	58%	61%
	3) married - spouse absent	3%	3%	3%	2%	2%
6. Do you have any children living at home or away at school but still dependent on you?						
	1) no	49%	56%	47%	56%	53%
	2) yes, one	13%	12%	16%	11%	14%
	3) yes, two	18%	14%	22%	15%	17%
	4) yes, three to five	18%	16%	14%	16%	15%
	5) yes, more than five	2%	2%	1%	3%	2%
7. What is the highest grade or year of school you ever attended?						
	1) less than 12 years	7%	2%	3%	7%	1%
	2) 12 years	33%	5%	15%	22%	12%
	3) 1 year of college	28%	6%	13%	20%	10%
	4) 2 years of college	19%	8%	27%	26%	18%
	5) 3 years of college	4%	8%	17%	12%	20%
	6) 4 years of college	4%	20%	15%	11%	16%
	7) graduate or professional	1%	12%	1%	-	9%
8. What is the highest degree you ever attained?						
	1) no degree	5%	1%	3%	6%	1%
	2) high school diploma	65%	17%	40%	48%	37%
	3) certificate at post-secondary level	14%	6%	10%	15%	10%
	4) A.A. degree	7%	6%	27%	21%	16%
	5) B.S. or B.A. degree	4%	52%	14%	7%	26%
	6) M.A. degree	1%	14%	2%	1%	3%
	7) Ph.D. or Ed.D	-	-	-	-	-
	8) M.B.A. or D.B.A.	-	1%	-	-	1%
	9) L.L.B. or J.D.	-	-	-	-	1%
	10) other professional degree	3%	3%	3%	2%	4%
9. What is the highest level of schooling your father attained?						
	1) 1-8 years	24%	20%	23%	21%	19%
	2) 9-11 years	18%	15%	20%	15%	16%
	3) 12 years	29%	29%	28%	36%	31%
	4) 1 year of college	3%	5%	4%	3%	4%
	5) 2 years of college	6%	7%	7%	7%	7%
	6) 3 years of college	1%	2%	1%	1%	2%
	7) 4 years of college	7%	9%	-	6%	9%
	8) graduate or professional school	5%	10%	6%	5%	9%
	9) don't know	7%	3%	4%	7%	4%

BEST COPY AVAILABLE

	COMM. COLL.	STATE COLL.	OTHER PUBLIC	PRIVATE-2 yr.	PRIVATE-4 yr.
10. What is the highest level of schooling your mother attained?					
1) 1-8 years	19%	16%	19%	19%	15%
2) 9-11 years	18%	14%	18%	12%	14%
3) 12 years	40%	41%	41%	49%	43%
4) 1 year of college	13%	6%	3%	3%	4%
5) 2 years of college	6%	8%	5%	3%	7%
6) 3 years of college	2%	2%	1%	3%	2%
7) 4 years of college	4%	7%	5%	3%	7%
8) graduate or professional school	4%	5%	4%	4%	5%
9) don't know	5%	3%	4%	5%	3%
11. What is your employment status (job for pay) as of this week?					
1) working outside the home	79%	77%	80%	84%	79%
2) looking for work	2%	2%	1%	2%	2%
3) not working outside the home	18%	20%	18%	13%	18%
For those having or looking for jobs:					
12. Does the job you have/had or are looking for involve?					
1) full-time work	80%	83%	85%	85%	85%
2) more than half, but less than full-time work	8%	8%	6%	8%	8%
3) less than half-time work	12%	9%	10%	8%	8%
13. How would you best describe the kind of work that you do? (did)?					
1) Professional/technical	25%	72%	53%	37%	46%
2) Managerial/administrative	11%	7%	22%	14%	22%
3) Clerical	20%	10%	10%	2%	12%
4) Sales	6%	3%	2%	5%	4%
5) Craftsman	8%	2%	5%	21%	3%
6) Operative	5%	1%	3%	5%	2%
7) Laborer	5%	2%	3%	3%	2%
8) Service Worker	5%	3%	2%	6%	3%
9) Protective Service Worker	18%	1%	-	6%	6%
14. What kind of business or industry do (did) you work in?					
1) agriculture	[illegible]	1%	1%	1%	1%
2) manufacturing	20%	7%	43%	36%	27%
3) construction	4%	3%	7%	25%	4%
4) transportation and public utilities	7%	2%	4%	3%	7%
5) wholesale, retail trade	12%	6%	5%	7%	8%
6) finance, insurance and real estate	6%	3%	5%	7%	8%
7) business and personal services	10%	7%	6%	4%	11%
8) professional services	21%	64%	21%	10%	23%
9) federal government	5%	3%	5%	2%	4%
10) local or state government	14%	4%	2%	7%	7%
15. What is or was your father's occupation?					
1) Professional/technical	14%	18%	17%	13%	16%
2) Managerial/administrative	16%	20%	14%	17%	22%
3) Clerical	3%	4%	2%	2%	3%
4) Sales	6%	7%	8%	5%	7%
5) Craftsman	24%	21%	24%	27%	22%
6) Operative	14%	10%	15%	19%	10%
7) Laborer	12%	9%	10%	11%	9%
8) Service Worker	4%	4%	6%	4%	4%
9) Protective Service Worker	8%	6%	4%	3%	6%
16. What is or was your mother's occupation?					
1) Professional/technical	14%	15%	13%	13%	14%
2) Managerial/administrative	4%	6%	4%	2%	4%
3) Clerical	19%	23%	19%	18%	22%
4) Sales	5%	6%	5%	4%	6%
5) Craftsman	3%	3%	3%	4%	2%
6) Operative	7%	5%	10%	6%	5%
7) Laborer	2%	8%	3%	2%	2%
8) Service Worker	9%	5%	9%	9%	7%
9) Protective Service Worker	-	1%	-	1%	-
10) Housewife -- never worked outside the home	37%	36%	34%	42%	39%

BEST COPY AVAILABLE

	COMM. COLL.	STATE COLL.	OTHER PUBLIC	PRIVATE-2 yr.	PRIVATE-4 yr.
For those who are now or ever were married:					
17. What was the highest level of schooling your spouse attained?					
1) less than 12 years	13%	6%	6%	10%	7%
2) 12 years	43%	24%	38%	43%	33%
3) 1 year of college	10%	10%	16%	14%	10%
4) 2 years of college	11%	9%	9%	13%	14%
5) 3 years of college	5%	5%	5%	2%	6%
6) 4 years of college	9%	21%	15%	12%	14%
7) graduate or professional school	8%	26%	12%	6%	15%
18. What is the employment status of your spouse as of this week?					
1) working outside the home	55%	64%	42%	52%	49%
2) looking for work	3%	1%	2%	1%	2%
3) not working outside the home	42%	29%	56%	45%	48%
19. If your spouse has or is looking for a job, or had a job outside the home, does (did) the job involve:					
1) full-time work	65%	79%	65%	61%	64%
2) more than half, but less than full-time work	8%	6%	11%	10%	7%
3) less than half-time work	16%	12%	18%	19%	19%
4) never worked outside home	10%	4%	7%	10%	9%
20. How would you describe the work that your spouse does (did)?					
1) Professional/technical	27%	46%	31%	27%	35%
2) Managerial/administrative	10%	12%	9%	10%	9%
3) Clerical	26%	17%	33%	35%	35%
4) Sales	6%	5%	6%	7%	34%
5) Craftsman	9%	6%	4%	2%	3%
6) Operative	7%	3%	6%	5%	3%
7) Laborer	3%	2%	2%	2%	1%
8) Service Worker	4%	3%	3%	5%	3%
9) Protective Service Worker	3%	2%	-	-	1%
10) Never worked outside home	6%	3%	6%	8%	6%
21. What kind of business or industry does (or did) your spouse work in?					
1) agriculture	2%	3%	1%	-	1%
2) manufacturing	17%	13%	12%	15%	12%
3) construction	6%	4%	2%	3%	2%
4) transportation and public utilities	7%	4%	6%	4%	6%
5) wholesale and retail trade	10%	10%	11%	9%	11%
6) finance, insurance and real estate	9%	7%	12%	13%	12%
7) business and personal services	14%	12%	13%	12%	12%
8) professional services	4%	3%	3%	5%	3%
9) government	3%	2%	-	-	1%
10) never worked outside home	6%	3%	6%	8%	6%
22. What was your income in 1972?					
1) no income	7%	9%	6%	5%	5%
2) under $5,000	27%	23%	19%	15%	19%
3) $5-7,000	13%	8%	9%	13%	8%
4) $7-8,000	7%	9%	10%	9%	5%
5) $8-10,000	13%	20%	17%	21%	13%
6) $10-15,000	25%	22%	33%	30%	34%
7) $15-25,000	7%	9%	7%	7%	15%
8) over $25,000	-	1%	-	1%	2%
23. What was your total family income in 1972? Please mark 1) if living at home with parents.					
1) at home with parents	26%	19%	16%	26%	19%
2) under $5,000	9%	5%	6%	4%	5%
3) $5-7,000	5%	3%	4%	2%	4%
4) $7-8,000	4%	4%	4%	3%	3%
5) $8-10,000	10%	10%	10%	9%	7%
6) $10-15,000	27%	26%	38%	28%	28%
7) $15-25,000	20%	28%	18%	22%	29%
8) over $25,000	3%	5%	3%	7%	7%

BEST COPY AVAILABLE

	COMM. COLL.	STATE COLL.	OTHER PUBLIC	PRIVATE-2 yr.	PRIVATE-4 yr.
24. Did you ever or do you now serve in the Armed Forces?					
1) never served	58%	74%	50%	52%	57%
2) veteran Armed Forces	39%	23%	46%	46%	39%
3) now serving in Armed Forces	4%	3%	3%	2%	5%

II. In the following section questions were asked about participation in continuing education.

	COMM. COLL.	STATE COLL.	OTHER PUBLIC	PRIVATE-2 yr.	PRIVATE-4 yr.
25. In what subject area or type of program are you currently enrolled?					
1) Regular academic subjects	33%	38%	26%	19%	27%
2) Trade and industrial	2%	2%	1%	22%	1%
3) Technical	8%	1%	14%	21%	9%
4) Business	24%	3%	25%	12%	26%
5) Professional	21%	8%	17%	23%	30%
6) Social or community service	8%	45%	13%	-	6%
7) Arts and crafts	1%	1%	-	2%	-
8) Family and personal skills	1%	2%	-	-	-
9) Cultural or personal interest	2%	1%	3%	1%	1%
26. What is your status as a student?					
1) enrolled in continuing education or evening division only	89%	89%	91%	84%	77%
2) enrolled full or part-time in regular day program of this institution	8%	8%	7%	7%	20%
3) enrolled full or part-time in regular day program of another institution	3%	3%	2%	4%	2%
27. What day of the week does this class meet? If more than once a week, mark this day only.					
1) Monday	29%	19%	23%	47%	24%
2) Tuesday	17%	30%	21%	13%	18%
3) Wednesday	18%	18%	29%	6%	27%
4) Thursday	29%	25%	27%	23%	21%
5) Friday	4%	1%	-	-	5%
6) Saturday	3%	6%	-	9%	5%
7) Sunday	-	-	-	3%	1%
28. At what hour of the day does this class begin?					
1) before noon	6%	6%	-	11%	12%
2) 12-3:00 p.m.	3%	-	-	-	3%
3) 3-4:00 p.m.	1%	1%	1%	-	1%
4) 4-5:00 p.m.	-	40%	-	-	4%
5) 5-6:00 p.m.	1%	-	-	4%	12%
6) 6-7:00 p.m.	49%	3%	20%	57%	42%
7) 7-8:00 p.m.	35%	48%	78%	25%	20%
8) 8-9:00 p.m.	2%	1%	-	-	6%
9) 9:00 p.m. or later	1%	-	-	2%	1%
29. Is this course offered as a credit course?					
1) yes, credit course	92%	99%	96%	75%	99%
2) no, non-credit course	9%	1%	4%	25%	1%
30. Are you taking this course for credit?					
1) yes, for one or two credits	11%	8%	8%	12%	41%
2) yes, for three credits	70%	89%	80%	45%	45%
3) yes, for four or more credits	8%	2%	6%	13%	12%
4) no, not for credit	11%	1%	6%	30%	3%
31. How many courses are you taking currently in continuing education?					
1) this course only	36%	42%	25%	38%	20%
2) two courses	38%	41%	29%	38%	34%
3) three courses	16%	9%	35%	16%	22%
4) four courses	10%	7%	11%	9%	24%

BEST COPY AVAILABLE

	COMM. COLL.	STATE COLL.	OTHER PUBLIC	PRIVATE-2 yr.	PRIVATE-4 yr.
32. How many hours a week do you spend in study for this class (do not include class time)?					
1) less than 2 hours	25%	34%	28%	30%	24%
2) 2-4 hours	36%	37%	35%	35%	40%
3) 4-6 hours	28%	21%	28%	24%	24%
4) 7-10 hours	8%	6%	8%	6%	9%
5) over 10 hours	4%	3%	9%	5%	4%
33. How many students are there in this class?					
1) less than 5 students	1%	1%	-	3%	1%
2) 5-10 students	4%	4%	3%	15%	7%
3) 11-15 students	12%	11%	17%	32%	17%
4) 16-20 students	19%	16%	26%	23%	20%
5) 21-30 students	35%	37%	41%	25%	36%
6) more than 30 students	29%	31%	13%	2%	20%
34. How does your taking this class fit into your daily routine?					
1) class directly from work	12%	29%	14%	28%	37%
2) leave work, go home, class	49%	36%	55%	39%	28%
3) leave work, eat out, class	7%	7%	10%	12%	10%
4) class before work	8%	2%	4%	2%	4%
5) class from home	24%	27%	18%	19%	22%
35. How did you get to class this week?					
1) Driver, private auto	83%	79%	85%	83%	76%
2) Passenger, private auto	12%	14%	10%	8%	7%
3) bus or street car	1%	2%	-	4%	5%
4) subway	1%	2%	-	1%	5%
5) taxicab	1%	1%	-	-	-
6) walked	2%	3%	4%	3%	8%
36. How far in miles is your present residency away from this class?					
1) 0-5 miles	37%	23%	28%	25%	28%
2) 5-10 miles	25%	20%	18%	20%	23%
3) 10-15 miles	16%	16%	18%	19%	16%
4) 15-20 miles	11%	12%	12%	12%	10%
5) 20-30 miles	8%	17%	11%	15%	13%
6) more than 30 miles	3%	10%	12%	10%	11%
37. Is this class held in the main campus of the institution or a branch campus?					
1) main campus	82%	92%	98%	90%	72%
2) branch campus	17%	7%	2%	6%	26%
3) work place	1%	2%	-	5%	2%
38. How long does it take you to get home from this course?					
1) less than 10 minutes	21%	11%	18%	17%	14%
2) 10-15 minutes	26%	15%	17%	16%	15%
3) 16-20 minutes	20%	14%	17%	16%	15%
4) 21-30 minutes	21%	25%	22%	23%	22%
5) 31-45 minutes	10%	23%	17%	22%	19%
6) 26-60 minutes	2%	9%	6%	6%	9%
7) more than an hour	1%	3%	2%	3%	4%

III. In the following section questions were asked about motivations for enrolling in the course.

	COMM. COLL.	STATE COLL.	OTHER PUBLIC	PRIVATE-2 yr.	PRIVATE-4 yr.
39. Where did you first hear about the course or program you are taking?					
1) through own search of schools in area	30%	56%	51%	47%	56%
2) from family	6%	3%	5%	3%	4%
3) from friends	17%	16%	17%	12%	15%
4) at work	18%	11%	11%	22%	14%
5) from job or employment counsellor	4%	2%	2%	4%	3%
6) newspaper or brochure	18%	11%	14%	11%	8%
7) radio	-	-	-	-	-
8) television	-	-	1%	1%	-

BEST COPY AVAILABLE

	COMM. COLL.	STATE COLL.	OTHER PUBLIC	PRIVATE-2 yr.	PRIVATE-4 yr.
10. Why are you taking this course in the continuing education division and not in the regular day program?					
1) applied to day and was not accepted	3%	2%	4%	1%	1%
2) taking to transfer credit to day program	12%	7%	12%	5%	5%
3) convenience of hours	69%	65%	73%	77%	78%
4) course offered only in continuing education	11%	23%	5%	13%	10%
5) open enrollment in continuing education	5%	4%	5%	3%	5%
11. Which of the following would you say best describes the reason you are participating in continuing education?					
1) for general information	10%	7%	10%	10%	9%
2) to improve or advance in job	53%	59%	58%	61%	59%
3) to get a new job	21%	23%	17%	18%	18%
4) for community activity	1%	2%	-	-	1%
5) for personal or family interests	13%	9%	13%	9%	11%
6) for social or recreational interests	1%	1%	2%	1%	1%
12. Are you taking courses to satisfy requirements for any one of the following degree programs?					
1) Certificate or 1 yr. diploma	2%	5%	1%	11%	1%
2) Associate or 2 yr. degree	59%	2%	19%	34%	12%
3) Bachelor's or 3 yr. degree	15%	26%	52%	27%	50%
4) Master's degree	2%	43%	6%	2%	11%
5) Ph.D. or Ed.D.	1%	1%	1%	1%	1%
6) M.B.A. or D.B.A.	1%	-	2%	-	13%
7) L.L.B. or J.D.	-	-	-	-	2%
8) Other professional degree	2%	4%	2%	2%	2%
9) no, not degree candidate	19%	20%	17%	24%	8%
43. If you are not now contemplating a degree or certificate, is your reason because that degree is not now being offered at an institution accessible to you?					
1) yes, because not offered	16%	20%	19%	16%	10%
2) no, not that reason	84%	80%	82%	84%	90%
44. If yes to above, what degree or certificate would you like to see offered?					
1) Certificate or 1 yr. diploma	12%	11%	12%	19%	10%
2) Associate or 2 yr. degree	23%	8%	10%	11%	18%
3) Bachelor's or 3 yr. degree	28%	11%	18%	22%	23%
4) Master's degree	5%	18%	21%	8%	12%
5) Ph.D. or Ed.D.	2%	15%	3%	1%	5%
6) M.B.A. or D.B.A.	2%	1%	6%	2%	7%
7) L.L.B. or J.D.	2%	2%	1%	2%	2%
8) Other professional degree	4%	8%	5%	8%	7%
9) no, not degree candidate	23%	26%	24%	29%	16%
45. Is your program of courses a continuation in the same subject area as your last full-time educational experience or in a different subject area?					
1) same subject area	45%	47%	53%	52%	46%
2) different subject area	55%	54%	47%	48%	54%
16. When you discontinued your education as a full-time student in the past, what was your main reason for doing so?					
1) still full-time student	9%	10%	9%	8%	13%
2) lack of adequate financial resources	21%	22%	26%	24%	26%
3) poor academic record	8%	5%	7%	5%	7%
4) serve in armed forces	11%	6%	12%	19%	12%
5) marriage	13%	15%	8%	10%	10%
6) dissatisfaction with school	11%	6%	13%	10%	10%
7) other personal reasons	26%	37%	24%	23%	23%

BEST COPY AVAILABLE

	COMM. COLL.	STATE COLL.	OTHER PUBLIC	PRIVATE-2 yr.	PRIVATE-4 yr.
47. Are you taking your program of courses for job advancement? If yes, what best describes your reason?					
1) no, not for job advancement	34%	28%	31%	24%	25%
2) yes, employer requires	4%	17%	5%	8%	5%
3) yes, I feel it is necessary	56%	50%	58%	64%	66%
4) yes, to take licensing exam	7%	5%	5%	5%	4%
For those taking the course for job advancement:					
48. If you feel this course will be of help to you in job advancement, are you upgrading your current skills or retraining in a new area of skills?					
1) upgrading current skills	53%	54%	62%	65%	57%
2) retraining in new area	47%	46%	38%	35%	45%
49. If you hope with the help of continuing education to get a new or different job, how would you describe that occupation?					
1) Professional/technical	36%	68%	51%	46%	42%
2) Managerial/administrative	23%	12%	31%	18%	37%
3) Clerical	6%	1%	1%	1%	1%
4) Sales	4%	-	2%	1%	1%
5) Craftsman	-	1%	1%	15%	1%
6) Operative	-	-	1%	2%	1%
7) Laborer	-	-	-	1%	-
8) Service Worker	1%	-	1%	1%	1%
9) Protective Service Worker	17%	-	1%	5%	6%
10) Am not looking for new job	13%	17%	12%	11%	9%
50. If you feel this course or program will be of help to you in job advancement, how much of a yearly increase in salary do you expect?					
1) no salary increase	15%	20%	21%	21%	18%
2) $100-299	8%	8%	4%	8%	4%
3) $300-499	8%	16%	6%	5%	3%
4) $500-749	9%	15%	7%	9%	7%
5) $750-999	8%	9%	8%	8%	5%
6) $1000-1499	17%	11%	15%	15%	14%
7) $1500-2000	10%	6%	9%	10%	14%
8) more than $2000	25%	15%	31%	24%	35%
51. What is the fee you are paying for this course?					
1) no fee	10%	6%	6%	10%	6%
2) under $35	6%	7%	40%	-	2%
3) $36-50	6%	6%	5%	2%	2%
4) $51-75	66%	35%	20%	23%	31%
5) $76-100	6%	43%	28%	9%	4%
6) $101-125	4%	2%	1%	24%	20%
7) $126-149	1%	1%	-	24%	20%
8) $150-200	-	1%	-	18%	23%
9) more than $200	-	-	-	7%	6%
52. What is the highest price you would be willing to pay for this course?					
1) no fee	6%	7%	6%	5%	6%
2) under $35	10%	8%	26%	1%	5%
3) $36-50	10%	9%	17%	3%	6%
4) $51-75	52%	26%	17%	15%	26%
5) $76-100	14%	40%	29%	21%	8%
6) $101-125	4%	5%	2%	18%	13%
7) $126-149	1%	2%	1%	11%	8%
8) $150-200	2%	2%	-	15%	21%
9) more than $200	1%	2%	1%	10%	7%

BEST COPY AVAILABLE

	COMM. COLL.	STATE COLL.	OTHER PUBLIC	PRIVATE-2 yr.	PRIVATE-4 yr.
53. Are you being reimbursed either in part or in full for taking your present course work?					
1) yes, reimbursed	43%	26%	54%	60%	61%
2) no, not reimbursed	58%	74%	46%	40%	39%
54. If you are reimbursed in part or in full, by whom?					
1) Government employer	16%	16%	10%	11%	7%
2) Private employer	32%	25%	34%	47%	53%
3) State Agency	6%	3%	3%	1%	2%
4) Federal Agency	11%	2%	4%	6%	7%
5) Financial aid or subsidy from institution	2%	3%	1%	1%	5%
6) Veteran's subsidy	33%	31%	47%	32%	26%
7) Teacher voucher	1%	20%	1%	1%	-
55. Was the price of tuition something you considered in making your decision to enroll?					
1) yes	38%	51%	44%	35%	26%
2) no	62%	49%	56%	65%	74%
56. If you are being reimbursed in part or in full, would you enroll in this course if you had to pay the entire cost yourself?					
1) yes	76%	76%	78%	74%	67%
2) no	24%	24%	22%	26%	33%
57. Would you take more courses if they were less expensive?					
1) yes	54%	57%	42%	49%	45%
2) no	46%	43%	58%	51%	55%
58. If you would favor heavier concentration of hours in certain times, what would they be?					
1) morning	27%	18%	18%	25%	24%
2) afternoon	13%	21%	11%	8%	15%
3) evening	49%	50%	58%	57%	50%
4) weekends	11%	11%	13%	10%	12%
59. Do you plan to take more courses in the next term?					
1) yes	81%	80%	82%	74%	74%
2) no	19%	20%	18%	26%	26%
60. If you do not plan to take more courses, what is your reason?					
1) am moving from area	25%	16%	16%	9%	13%
2) courses too costly	12%	16%	13%	11%	10%
3) no interest in other courses	18%	14%	26%	14%	12%
4) have completed requirements for degree	16%	30%	14%	42%	37%
5) personal reasons	25%	19%	25%	15%	23%
6) do not like the course	1%	2%	2%	4%	2%
7) too far to drive	1%	3%	2%	3%	2%
8) have used up veterans or teachers subsidy	1%	-	2%	3%	2%
61. What is the main reason why you are taking this course at this particular institution and nowhere else?					
1) only institution offering program in the area	23%	21%	21%	24%	25%
2) cost lower at this school	21%	34%	18%	11%	11%
3) closer to home or office	39%	33%	42%	24%	28%
4) time offered more convenient	10%	6%	5%	12%	16%
5) quality of instruction higher	6%	5%	14%	30%	19%
6) parking adequate	-	1%	-	-	2%

BEST COPY AVAILABLE

	COMM. COLL.	STATE COLL.	OTHER PUBLIC	PRIVATE-2 yr.	PRIVATE-4 yr.
IV. In the following section, questions were asked about reactions to possible changes in current programs across the state.					
62. Are you interested or do you think more courses should be offered across the state in continuing education which are academic?					
1) no, I think programs are adequate currently	19%	17%	22%	18%	20%
2) yes, I would be interested in new programs for my own use	53%	59%	51%	51%	49%
3) yes, although I would not use new programs, I think they should be offered to others	29%	24%	28%	30%	31%
63. .... trade or technical?					
1) no, programs adequate	14%	14%	17%	11%	16%
2) yes, would use personally	37%	29%	34%	52%	33%
3) yes, for use of others	49%	58%	49%	37%	51%
64. .... business-oriented?					
1) no, programs adequate	21%	21%	30%	24%	25%
2) yes, would use personally	38%	23%	38%	33%	43%
3) yes, for use of others	41%	57%	32%	43%	33%
65. .... professional or at the graduate level?					
1) no, programs adequate	17%	12%	17%	18%	19%
2) yes, would use personally	51%	71%	57%	50%	57%
3) yes, for use of others	32%	17%	26%	33%	24%
66. .... social and community service subjects?					
1) no, programs adequate	25%	16%	31%	25%	24%
2) yes, would use personally	39%	52%	32%	27%	36%
3) yes, for use of others	[illegible]	32%	37%	48%	41%
67. .... arts and crafts, culture or personal interest subjects?					
1) no, programs adequate	29%	19%	29%	22%	28%
2) yes, would use personally	36%	50%	35%	33%	36%
3) yes, for use of others	36%	31%	36%	46%	36%
68. Would you prefer to take a course with a longer class hour at each meeting, such as a full day on a weekend but with fewer class meetings?					
1) no, programs adequate	71%	71%	80%	66%	73%
2) yes, would use personally	22%	24%	15%	26%	[illegible]
3) yes, for use of others	6%	5%	5%	9%	6%
69. Are you interested in or do you think there is a need for more branch or local campuses to be opened?					
1) no, programs adequate	38%	35%	50%	31%	37%
2) yes, would use personally	45%	51%	34%	52%	43%
3) yes, for use of others	18%	14%	16%	17%	20%
70. Are you interested in or do you think there is a need for an "open university" (expanded home television and correspondence program)?					
1) no, programs adequate	40%	35%	43%	40%	40%
2) yes, would use personally	41%	43%	42%	41%	39%
3) yes, for use of others	19%	22%	15%	19%	21%
71. Are you interested in or do you think there is a need to have courses in your work place?					
1) no, programs adequate	46%	39%	47%	36%	42%
2) yes, would use personally	40%	48%	41%	53%	46%
3) yes, for use of others	14%	13%	12%	11%	13%
72. Do you think there is a need to have courses that give credit for experience outside the classroom?					
1) no, programs adequate	14%	13%	15%	10%	16%
2) yes, would use personally	73%	73%	75%	77%	70%
3) yes, for use of others	13%	15%	10%	13%	14%

BEST COPY AVAILABLE

	COMM. COLL.	STATE COLL.	PUBLIC	PRIVATE-2 yr.	PRIVATE-4 yr.
73. Do you feel greater counselling services are needed where educational alternatives and opportunities as well as problems can be discussed?					
1) no, programs adequate	24%	14%	22%	16%	19%
2) yes, would use personally	57%	66%	65%	63%	63%
3) yes, for use of others	19%	19%	14%	21%	18%
74. If you are married, would you be interested in bringing your family together to a center where a variety of children's and adult's programs would be offered separately but at the same time and in the same building?					
1) no, programs adequate	24%	18%	22%	27%	25%
2) yes, would use personally	54%	61%	63%	47%	55%
3) yes, for use of others	22%	21%	16%	27%	21%

III.A.9. The Sample of Continuing Education Students: Sample Design and Reliability of Results

In February and March of 1973 a survey was administered to continuing education students in Massachusetts. Over 6,000 students responded to 74 questions about their background, course of study, and motivations for enrolling in continuing education.

The method of reaching students was to administer the questionnaire during class time to all students in the classroom. This method was specifically chosen because it would assure a high response rate and preclude problems of biases in results from non-response. Other methods such as mailings or registration questionnaires were not used because they typically have a low return rate.

Because all students in the class were asked to fill out the questionnaire, there was no comparable way that part-time-students-in-regular-full-time classes could be reached. For this reason, these part-time students were not included in the sample. However, continuing education classes in all regular or special, credit or noncredit, branch or main campus programs were randomly sampled if the class met weekly. Conferences were thus excluded.

The method of sampling, or choosing which students to question, was proportionate sampling. Each school was sent a number of questionnaires equal to its share or proportion of students in the total of Massachusetts continuing education students.

Within each program classes of students were selected randomly. The classes in the Winter or Spring term were listed in order and numbered by time of day, subject given, or other category. Classes were selected from lists to be sampled according to the sequence of numbers in a random numbers table sent to each school. This table varied from school to school. The course listings and random numbers tables were returned in each case indicating that the selection procedure had been random.

This method of proportionate sampling of each institution and random sampling of classes within each institution meant that the sample would be representative of the total continuing education population. Responses were not presented for any one school, however. If the school were small, and only one or two classes were sampled, then the students might not be representative of the whole group in that institution.

Participation in the questionnaire was high. The only major program which did not participate was the Harvard University Extension. The following schools participated:

Continuing Education Programs Sampled

SPRINGFIELD AREA

American International College
Holyoke Community College
Springfield College
Springfield Technical Community College
Western New England College
Westfield State College

PITTSFIELD/NORTH ADAMS AREA

Berkshire Community College
North Adams State College

AMHERST/NORTHAMPTON AREA

U./Mass. - Amherst
Greenfield Community College

WORCESTER AREA

Anna Maria College for Women
Assumption College
Clark University
Quinsigamond Community College
Worcester Junior College
Worcester Polytechnic Institute
Worcester State College

FITCHBURG/GARDNER AREA

Fitchburg State College
Mt. Wachusett Community College

FRAMINGHAM AREA

Framingham State College

LYNN/SALEM AREA

North Shore Community College
Salem State College

ANDOVER/LOWELL AREA

Lowell Tech. Institute
Merrimack
Northern Essex Community College

BURLINGTON/BEDFORD AREA

Middlesex Community College

BROCKTON AREA

Bridgewater State College
Dean Junior College
Massasoit Community College
Stonehill College

FALL RIVER/NEW BEDFORD AREA

Bristol Community College
Southeastern Mass. University

FALMOUTH/BARNSTABLE AREA

Cape Cod Community College
Mass. Maritime Academy

BOSTON AREA

Babson College
Bentley College
Boston College
Boston State College
Boston University
Emmanuel College
Franklin Institute
Hebrew Teachers College
Lesley College
Mass. Bay Community College
Mass. College of Art
Northeastern University
Pine Manor Junior College
Radcliffe College
Regis College
Suffolk University
Tufts University
Wentworth Institute
Wheelock College

In total, 6,197 questionnaires were returned, or 7% of the total continuing education student population of Massachusetts. The proportions of institutions were representative of their share in the total:

	Sample Proportions		Population Proportions
Public Institutions	3597 or 58%		56%
Community Colleges	1765	28%	28%
State Colleges	1427	23%	20%
U. Mass.	100	2%	2%
Other Public	305	5%	6%
Private Institutions	2600 or 42%		44%
TOTAL:	6197		

The reliability of the sample results in the previous sections is as follows: each percentage as presented is within 95% certainty within a range as given below. For the total sample the relevant line of numbers is 6,000, for public institutions 4,000, etc.

Reliability of Survey Percentages*

	90% or 10%	80% or 20%	70% or 30%	60% or 40%	50%
6,000	1.0%	1.3%	1.4%	1.6%	1.6%
4,000	1.2%	1.6%	1.8%	1.9%	1.9%
2,000	1.7%	2.2%	2.5%	2.7%	2.7%
1,000	2.4%	3.1%	3.6%	3.8%	3.8%

*This table is derived from a formula for proportionate sampling. The percentage reliabilities shown above reflect the survey design effect of clustering responses from classes in the schools. The numbers were calculated for the 99% confidence level, but presented as the 95% confidence level, as there is a small but additional multiplier effect of the clustering in schools. This effect is not likely to be great, however. See Leslie Kish, Survey Sampling, Wylie, 1967, p.586 for an estimation in consumer behavior that this design effect is not greater than 1.07%.

BEST COPY AVAILABLE

B. Comparison of Students Characteristics to Census of Population Characteristics

DISCUSSION III-65
    Statewide III-65
    Substate Regions. III-66
    Geographic Service Areas. III-66

1. Table: Comparison of Student Characteristics to Census of Population Characteristics: Statewide . . . III-68

2. Table: Comparison of Student Characteristics to Census of Population Characteristics: Substate Regions III-70

3. Table: Comparison of Student Characteristics to Census of Population Characteristics: by Geographic Service Areas. III-71

DISCUSSION OF COMPARISON OF CONTINUING EDUCATION STUDENTS TO MASSACHUSETTS POPULATION

Statewide

The student questionnaire results have provided information about the clientele of students currently in continuing education. When compared with the general Massachusetts population, it becomes clear that this group of students are a privileged segment of the population. Measured on income, occupation, or educational scales they are middle or upper middle class in status.

The following table shows a direct comparison of the profile of continuing education students, male and female, with the Massachusetts population as developed in the 1970 U.S. Census in Massachusetts. This table shows that:

--while 76% of male students and 69% of female students are in families with incomes over $10,000, only 41% of the families in Massachusetts have incomes over $10,000.

--while 62% of employed male students and 57% of employed female students are in professional or managerial positions, only 25% of employed males and 20% of employed females are in comparable jobs.

--while 3% of male students and 2% of female students have less education than a high school diploma, 37% of the Massachusetts population over 18 has less than a high school diploma.

These three measures of social status are interrelated and education is the key link. People who have attained high levels of education are qualified for good jobs. It has been seen that the major intent of continuing education students for taking courses is to improve their position in the economy.

The fact that continuing education serves individuals already high on social status scales means it is acting to widen the distribution of income within the State rather than provide opportunities for low income people or equalize it. Instead of serving to upgrade the employability of the disadvantaged and unskilled, it is increasing the already high potential of people in the middle and upper middle class. The income gaps among these groups grow as a result.

The exclusion of lower income, occupation and education groups from continuing education is partially due to a lack of interest on their part, partially to an inadequate response of the system to their needs.

Although continuing education is housed in the colleges and universities, the people to be served are not just those at the college level in their education. The expressed goal of the public education system is to serve those with even less than a high school diploma. Continuing education is thus designed to be open and flexible in accepting people without the traditional "proper" credentials,

It is important that continuing education programs be more open to citizens regardless of educational background. Adult education should be designed to provide a "second chance" for those people past the college age who can benefit from programs. Many of these people left school for economic reasons at a time when access to education was limited or dropped-out from lack of interest. As they grow older and develop through experience, they are better suited to continuing education.

Other significant differences and parallels between the continuing education student population and Massachusetts' population are revealed by the following table: Males are over-represented and females under-represented; 18 to 34 age groups are over-represented and those over 45 under-represented; racial and ethnic character are proportionately represented; single persons are over-represented and married persons under-represented.

It is clear that continuing education is not currently serving large numbers of the middle-aged or elderly population. Only 9% of continuing education students are over 45, compared to 48% in the population at large. This is surprising in view of the obvious potential of programs to serve people considering a mid-career change or housewives returning to work.

Substate Regions

Geographic Service Areas

Both these comparisons are presented in the tables which follow. In general interpretation they do not differ significantly from the preceeding discussion of statewide comparisons.

III.B.1. Table: Comparison of Student Characteristics to Census of Population Characteristics: Statewide

III.B.2. Table: Comparison of Student Characteristics to Census of Population Characteristics: Substate Regions

III.B.3. Table: Comparison of Student Characteristics to Census of Population Characteristics: Geographic Service Areas

Source for the Massachusetts population is the U.S. Census of Population, 1970 (Massachusetts).

Data for ethnic background, school, and family income are not differentiated in the Census by sex. Therefore figures for male and female are the same. Data for the population in each area (in Section III.B.3.) are for the Standard Metropolitan Statistical Areas (SMSA's) in the Census.

III.B.1. Comparison of Student Characteristics to Census of Population Characteristics: Statewide

Source for Massachusetts: U.S. Census of Population, 1970 (Massachusetts).

		MALE		FEMALE	
		Mass.	Students	Mass.	Students
1.	Age Distribution (Mass.: of those over 18)				
	18-25	17%	27%	14%	39%
	25-29	10%	32%	9%	21%
	30-34	8%	19%	7%	13%
	35-44	18%	15%	16%	16%
	over 45	46%	7%	51%	11%
2.	Sex (Mass.: of those over 18)	46%	66%	54%	34%
3.	Race (Mass.: of those over 18)				
	Black	2.6%	3%	2.7%	2%
	Spanish-Speaking	96%	96%	97%	97%
	White	1%	1%	1%	1%
4.	Ethnic Background (Mass.: of those over 18)				
	Native	76%	80%	76%	81%
	Father Foreign born	20%	16%	20%	14%
	Foreign born	4%	5%	4%	5%
5.	Marital Status (Mass.: of those over 18)				
	Single	19%	33%	17%	46%
	Married	81%	66%	83%	51%

	MALE		FEMALE	
	Mass.	Students	Mass.	Students
6. Schooling (Mass.: of those 18 and over)				
less than 12	37%	3%	37%	2%
12 years	33%	15%	33%	20%
1-3 years college	17%	46%	17%	39%
4 or more years college	12%	35%	12%	38%
7. Employment Status (Mass.: of those 16 and over)				
working	75%	86%	83%	68%
looking for work	3%	2%	2%	2%
not working	22%	12%	55%	30%
8. Occupation of Employed (Mass.: of those 16 and over)				
Professional/technical	17%	43%	17%	51%
Managerial/administrative	8%	19%	3%	6%
Clerical	20%	4%	37%	31%
Sales	7%	4%	7%	6%
Craftsman	13%	7%	2%	1%
Operative	18%	4%	17%	1%
Laborer	4%	4%	1%	-
Service Worker	10%	3%	16%	4%
Protective Service Worker	2%	11%	-	1%
9. Family Income (Mass.: families and unrelated individuals) (CE: those not living at home with parents)				
less than $5,000	30%	6%	30%	10%
$5,000-$6,999	11%	6%	11%	7%
$7,000-$7,999	6%	6%	6%	5%
$8,000-$9,999	12%	11%	12%	11%
$10,000-$14,999	23%	39%	23%	27%
$15,000-$24,999	14%	32%	14%	32%
$25,000 and over	4%	5%	4%	10%

BEST COPY AVAILABLE

III.B.2. Comparison of Student Characteristics to Census of Population Characteristics--by Substate Region

	WESTERN			CENTRAL			NORTHEAST			SOUTHEAST			BOSTON		
	Population		CE	Population		CE	Population		CE	Population		CE	Population		CE
1. Age Distribution (Mass.: of those over 18)	M	F		M	F		M	F		M	F		M	F	
20-24	14	13	33	12	11	33	11	11	32	11	11	33	15	15	30
25-29	10	9	30	11	10	26	10	10	25	11	10	27	12	10	31
30-34	8	7	16	9	8	16	9	9	18	9	8	15	8	7	18
35-44	18	17	14	19	18	17	21	19	15	19	17	15	17	15	14
45 and over	50	54	7	49	53	8	48	52	11	51	45	10	48	54	8
2. Sex (Mass.: of those over 18)															
Male	47		67	47		59	47		63	48		59	45		72
Female	53		33	53		41	53		38	52		41	55		28
3. Occupation of Employed (Mass.: of those 16 and over)															
Professional	15	17	47	16	16	50	20	17	41	13	14	46	20	19	46
Managerial	11	3	15	12	3	12	14	3	12	12	3	11	12	3	18
Clerical	7	7	11	7	7	14	7	7	16	7	6	14	8	7	12
Sales	8	34	4	7	33	6	8	35	6	7	30	4	11	93	4
Craftsmen	21	2	5	21	2	5	20	2	4	24	2	5	18	1	5
Operative	22	16	3	21	19	3	17	19	4	21	26	2	14	10	2
Laborer	7	1	3	6	1	4	6	1	3	7	1	4	6	1	3
Service	10	19	12	19	18	6	9	16	14	10	17	14	12	15	107
	Population		CE	Population		CE	Population		CE	Population		CE	Population		CE
4. Income	M	F		M	F		M	F		M	F		M	F	
No income	1	5	7	1	4	10	1	5	7	2	5	7	2	4	5
under $3,000	15	40	14	14	40	14	12	39	14	14	42	13	15	35	12
$3,000-$4,999	9	27	7	9	28	10	7	25	9	11	30	11	10	23	8
$5,000-$6,999	18	17	9	16	18	10	15	19	10	19	15	11	15	22	9
$7,000-$7,999	12	4	8	11	4	6	10	4	8	11	5	9	10	6	6
$8,000-$9,999	20	4	18	18	4	17	17	4	14	18	4	18	17	5	13
$10,000-$14,999	19	2	28	22	2	23	23	3	30	19	2	24	20	4	32
$15,000-$24,999	5	.	8	8	1	8	10	1	7	6	1	6	8	1	15
$25,000 and over			1	2		1	3		1	2		1	3		1
5. Family Income															
without parents			22			24			22			22			20
under $3,000	7		3	6		2	5		2	7		2	7		3
$3,000-$4,999	8		3	6		4	6		3	8		2	8		3
$5,000-$6,999	11		3	9		4	9		4	11		5	10		4
$7,000-$7,999	7		4	6		2	6		3	7		5	6		3
$8,000-$9,999	16		10	14		9	14		8	15		11	13		7
$10,000-$14,999	32		32	33		26	32		32	31		27	29		26
$15,000-$24,999	17		21	20		25	23		24	16		23	21		28
$25,000 and over	4		3	5		5	6		4	4		3	7		7
6. Ethnic Background (Mass.: of those over 18)															
Native	71		82	69		78	69		83	68		82	62		78
Father foreign born	22		15	24		17	24		15	23		14	27		15
Foreign born	7		3	7		4	7		3	8		3	11		7
7. Industry	Population		CE	Population		CE	Population		CE	Population		CE	Population		CE
Agriculture	1		1	1		1	1		1	2		2	1		1
Manufacturing	34		21	36		21	34		26	33		16	20		23
Construction	5		4	5		5	5		4	7		4	5		6
Utilities/Transportation	5		7	5		4	5		3	6		4	7		7
Trade	19		10	20		10	20		9	20		10	21		7
Finance	5		6	4		7	5		5	4		4	8		8
Services	6		7	6		8	7		10	6		8	8		11
Professional Services	21		33	19		38	18		28	17		39	24		27
Public Administration	4		12	4		7	15		15	5		15	6		12

BEST COPY AVAILABLE

III.B.3. Comparison of Student Characteristics to Census of Population Characteristics--by Geographic Service Area

	Springfield		Pittsfield/No. Adams		Worcester		Fitchburg/Gardner	
	CE students	Population	CE students	Population	CE students	Population	CE students	Population
1. Age Distribution (Mass.: of those over 18)								
18-25	26	18	55		37	18	25	
25-29	32	10	25		26	9	28	
30-34	19	7	9		17	7	14	
35-44	16	15	4		15	17	21	
over 45	7	52	7		7	49	12	
2. Sex (Mass.: of those over 18)								
Male	74	45	49		54	47	79	
Female	26	55	51		46	53	21	
3. Ethnic Background								
Native	82	68	86	74	80	68	75	64
Father Foreign Born	15	24	12	20	17	25	21	26
Foreign Born	3	7	2	6	4	7	4	10
4. Marital Status (Mass.: of those over 18)								
Single	30	20	52		39	21	26	
Married	70	80	48		61	79	74	
5. Schooling (Mass.: of those 25 and over) (CE students: of those 25 and over								
less than 12	3	47	3	39	2	46	5	51
12 years	14	34	17	39	14	32	20	33
1-3 years college	45	9	53	10	42	12	35	9
4 years college	10	6	9	7	16	6	8	4
5 or more years college	26	4	20	3	26	4	31	3
6. Employment Status (Mass.: of those 16 and over)								
working	84	57	70	57	76	57	89	60
looking for work	2	2	2	2	1	2	2	3
not working	14	40	28	41	23	41	9	38
7. Occupation of Employed (Mass.: of those 16 and over)								
Professional/technical	45	14	50	20	49	16	60	12
Managerial/administrative	17	8	11	9	11	8	9	8
Clerical	11	19	11	20	16	19	8	17
Sales	4	7	6	7	8	7	2	7
Craftsman	4	14	4	12	3	14	12	15
Operative	3	21	4	17	3	20	3	26
Laborer	2	4	5	3	5	4	4	4
Service Worker	2	11	9	11	4	12	3	10
Protective Service Worker	12	2	1	1	2	2	0	1
8. Family Income (Mass.: families and unrelated individuals (CE: those not living at home with parents)								
less than $5,000	3	31	7	25	7	29	7	29
$5,000-$6,999 $7,000-$7,999 $8,000-$9,999	23	29	16	29	23	28	21	31
$10,000-$14,999	20	24	38	28	29	25	38	25
$15,000-$24,959 $25,000 and over	31	15	40	18	41	17	34	15

BEST COPY AVAILABLE

Comparison of Student Characteristics to Census of Population Characteristics--by Geographic Service Area, cont'd.

		Andover/Lowell		Fall River/New Bedford		Brockton		Boston	
		CE Student	Population	CE Student	Population	CE Student	Population	CE Student	Population
1.	**Age Distribution** (Mass.: of those over 18)								
	18-25	29	16	28	17	34	19	33	18
	25-29	32	10	25	8	30	11	32	10
	30-34	22	9	19	7	14	9	16	8
	35-44	12	18	17	16	14	18	12	17
	over 45	5	48	10	53	9	45	7	48
2.	**Sex** (Mass.: of those over 18)								
	Male	92	46	68	46	58	48	71	46
	Female	8	54	32	54	42	52	29	54
3.	**Ethnic Background** (Mass.: of those over 18)								
	Native	83	67	80	56	83	73	78	63
	Father Foreign born	14	25	19	31	8	20	15	24
	Foreign born	4	8	2	13	9	6	7	13
4.	**Marital Status** (Mass.: of those over 18)								
	Single	24		30		36		46	
	Married	76		70		64		54	
5.	**Schooling** (Mass.: of those 25 and over) (CE students: of those 25 and over)								
	less than 12	2	47	6	70	4	41	3	47
	12 years	16	34	29	19	18	40	13	34
	1-3 years college	67	10	46	5	32	11	40	9
	4 years college								
	5 or more years college	4	4	10	2	32	3	28	5
6.	**Employment Status** (Mass.: of those 16 and over)								
	working	92	60	84	59	79	59	79	56
	looking for work	1	3	1	3	1	2	2	3
	not working	7	38	15	39	20	39	19	41
7.	**Occupation of Employed** (Mass.: of those 16 and over)								
	Professional/technical	48	16	30	9	57	14	45	17
	Managerial/administrative	18	7	16	6	9	8	17	6
	Clerical	5	18	11	14	14	19	14	27
	Sales	4	6	3	6	3	7	4	6
	Craftsman	5	14	5	14	5	16	6	10
	Operative	3	23	4	34	1	20	2	14
	Laborer	3	4	6	5	2	4	3	4
	Service Worker	2	10	0	10	3	10	4	15
	Protective Service Worker	11	2	25	2	7	2	6	2
8.	**Family Income** (Mass.: families and unrelated individuals) (CE: those not living at home with parents)								
	less than $5,000	2	27	6	34	6	25	9	28
	$5,000-$6,999	17	29	28	34	26	29	21	28
	$7,000-$7,999								
	$8,000-$9,999								
	$10,000-$14,999	55	26	41	22	33	29	31	26
	$15,000-$24,999	26	18	26	10	35	18	35	18
	$25,000 and over								

BEST COPY AVAILABLE

C. Special Clientele Groups

1. Elderly III-75
   Degree-Granting Institutions. III-75
   Proprietary and Independent Institutions. III-77
   Adult Education Centers III-78

2. Women III-79
   Degree-Granting Institutions. III-79
   Community Centers III-84
   Conclusion. III-85

3. Disadvantaged III-86
   Degree-Granting Institutions. III-86
   Adult Education Programs. III-90
   Conclusion. III-91

III.C.1. Elderly

Information obtained from institutions of higher education in Massachusetts says little about part-time and continuing education for the elderly. In general, the elderly do not seem to be considered a special clientele group, let alone one which is not being reached. An examination of the information obtained follows.

From the information which was obtained in this inquiry, several conclusions about part-time and continuing education for the elderly in Massachusetts can be drawn. There are few programs in post-secondary education which are designed specifically for the elderly, and there are few elderly students taking courses in the schools. Not surprisingly, the community colleges express most interest in the elderly as a clientele group and are initiating new programs to suit their needs. Perhaps inhibiting the elderly from continuing their education is the feeling on their part that they are too old to learn and they may be uncomfortable with the younger students.

Degree-granting Institutions

Western Region

In this region, the public colleges express more of an interest in the elderly than do the private colleges. Greenfield Community College has a special self-help program entitled "Aging" which has been offered for the aged in response to a community need. Holyoke Community College mentions plans to offer a course in Continuing Education entitled "Sociology of Aging," in Spring 1973. However, they do not indicate what clientele this course is expected to serve nor do they presently have any continuing education students over 65. For part-time students in the full-time programs, there is a new program planned for September 1973 which is designed specifically for older people called "Educare." The need for it was determined through consultation with local and state directors of elderly affairs and through questionnaire response. The format of the program will include regular classes, short courses and closed circuit television. Holyoke Community College expresses a hope for a greater number of retired persons to be enrolled in the future.

Springfield Technical Community College is situated in the midst of an elderly housing area. However, they have no part-time students over 55 in their full-time programs, and their experience seems to indicate that elderly people in general seem to have little interest in education in its usual form.

Yet elderly people could profit in terms of personal growth and association with young people and could be an asset to the college with their vast experience. The issue is how continuing and part-time education can better adapt to their needs.

In the survey, American International College was the only private college in the Western Region to mention the elderly. AIC is aiming promotional efforts for part-time students in full-time programs at the Senior Citizen Segment of the population, and soon all areas of the college will be open to them. AIC believes these potential Senior Citizen students would prefer to enroll in regular programs rather than in programs designed for their specific group. Their areas of interest are expected to be in the humanities and social sciences rather than the sciences. American International College indicates that one of the major difficulties inhibiting elderly students from enrolling is the feeling that they are too old to learn and would not be well received by younger students.

Central Region

Of the public colleges responding to our inquiry, only Worcester State expresses an interest in drawing more older students to its program. Worcester State does not even specify "elderly". The same is true of the private colleges in the Central Region; Worcester Polytechnic Institute expects a larger proportion of "Older" people in the next few years.

Northeast Region

The private colleges in the Northeast Region do not mention the elderly at all as a potential or actual clientele group. However, several public insitutions see them as an important group. Middlesex Community College is planning two programs concerning the elderly and aging: "Elderly Affairs" to begin in September 1974 and "Pre-retirement" for 1975. Northern Essex Community College cites the elderly as needing continuing education and being a group whose needs are not being met. A Spring Workshop called "Retirement Studio" was planned for Spring 1973. It was designed to open up the resources of the college to everyone of retirement age in the community. Needlework and whittling courses were offered. Northern Essex Community College expects that courses will be planned by and for the elderly and is making a strong effort to encourage the elderly to participate in its courses, believing that fear of college and fear of education is what inhibits elderly people from enrolling in continuing education courses.

North Shore Community College has 88 people over 65 in its continuing education program, yet the college believes that the only clientele group not yet reached to its fullest is the elderly. Courses, projects and workshops are being designed. These are noncredit programs and include personal typing, speedwriting, woodworking, basic office procedures, A.V. techniques, income tax preparation, fashion grooming, and lip reading. North Shore also will have personal and academic counseling for the elderly available free of charge as well as a retirement center with retirees for lecturers.

In April 1973, North Shore Community College held a conference for older Americans for the purpose of evaluating the needs of the elderly in the area and with the hope of improving the relationship between the College and older Americans. As a result of the conference, an advisory committee of senior citizens is being formed and a senior citizen will be hired to coordinate continuing education programs for senior citizens. At the conference, they requested courses such as psychology of aging, nutrition, self-defense, sex over sixty, sign language for the deaf, social security, wills and estate planning, personal grooming, high school equivalency, and seminars on housing. It was clear at this conference that the elderly do not want to be considered to be any different from anyone else and they want the same opportunities open to them.

Southeast Region

Of the Southeast Region public colleges, Massasoit Community College seems particularly concerned with the elderly in its continuing education program. They have a new program planned entitled "Elderly" which will be offered because of need of better trained personnel to work with the elderly, and because they see the value of utilizing the elderly as research personnel. In the fall of 1973, Massasoit's continuing education division plans to undertake a cooperative venture with the city of Brockton which will be for the training of service personnel and the elderly in order to utilize existing human resources. The city of Brockton established that there was a need for educational service to the elderly and plans are underway to develop a program to meet the various needs.

In the private colleges in the Southeast Region, Dean Junior College offers a special program in "Creative Retirement" free of charge for the elderly. There are now 52 enrolled in this continuing education program.

Boston Region

In the largest region, only a few schools expressed specific interest in the elderly as a clientele group. Massachusetts Bay Community College is planning an Elderly Affairs program (Gerontology) in cooperation with the Office of Elderly Affairs, Boston University and the Massachusetts Community College System. It will start in the fall of 1973. U./Mass.-Boston and Regis College plan to increase services to the elderly. Regis hopes to provide seminars and workshops for older clientele. Quincy Junior College reports some aged students but cite the aged as a target audience. They hope that with the expected merger of Quincy Junior College with the planned South Shore Community College, the scope of community service will be broadened to include more participation by the elderly.

Proprietary and Independent Institutions.

Of the Proprietary and Independent institutions of postsecondary education which responded, only the Hickox School has students over the age of 65. Both the Episcopal Theological School and the Massachusetts Association of Real Estate Boards have students up to the age of 65. However, Proprietary and Independent institutions are often specialized and career-oriented, and have a relatively young clientele.

Adult Education Centers

The adult education centers offer much more to the elderly than do the proprietary and independent institutions. Their courses are more general and less career-oriented, and therefore appeal to the person taking them for personal development or interest.

Of the adult education centers in the Western Region, both the Greenfield Public Schools and the Amherst-Pelham Regional School District have senior citizens enrolled.

In the Central Region, the Lynn Evening School for Adult Education offers "Arts and Crafts" and "Family and Personal Skills" programs for retirees. They feel that there is competition for these programs from the Senior Citizens group. There is some cooperation with North Shore Community College in these programs. The Swampscott Schools offer courses to people over 65 free of charge. The North Reading Public Schools have students ranging in age from their 20's to their 70's.

Of those who responded to this inquiry, one in the Southeast Region mentioned having senior citizens taking their courses. The Hingham Public Schools in this region offer a course in retirement planning and investments for older people.

The adult education centers in the Boston Region seem to consider the elderly an important group. The Lincoln-Sudbury Middle School has retired people as students; the Canton Public Schools hope to have more courses for the elderly; the Winthrop Center for Adult Education has students ranging in age from 18 to 90; the Weymouth Evening School has programs dealing with family and personal skills for senior citizens.

III.C.2. Women

Degree-granting Institutions

Western Region

In this region, public colleges express more of an interest in special programs for women than the private colleges. Greenfield C.C. has several Special Programs in Continuing Education designed for women. These Evening Courses include: courses for WIN mothers in GED and typing (upgrading skills); a mechanics workshop for community women; workshops in interior decorating, cooking, home art, and crocheting for homemakers; self-improvement for enrichment. Almost half of the Continuing Education students at Greenfield are women.

Holyoke C.C. offers courses in Secretarial Studies for women entering or reentering the field, and for those presently working and interested in advancement. Holyoke is planning to institute a program in continuing education for nurses which will offer diploma school graduates the opportunity to earn credits toward an associate or bachelor's degree. As a first step in this plan, a course in "Interpersonal Relations in Nursing" was offered in Spring 1973. At present about one-third of the Continuing Education student body are women. In addition, the Continuing Education program hopes to reach more women in the future by allowing for credit by examination and by offering courses by cable T.V. The college also hopes to enroll more women as part-time students in career programs in its day courses in the coming years.

Springfield Technical C.C. offers two special programs of interest to women: 1) Early Childhood Seminar for those who are working with children, and 2) Core Nursing Program which offers college credit to student nurses at Springfield Hospital.

At the University of Massachusetts at Amherst, both Continuing Education for Women and Everywoman's Center have programs designed to meet the needs of women. Everywoman's Center is a collaborative service of the Division of Continuing Education, the Counseling Center, and the Office of Community Development and Human Relations. Among the services currently provided by the Center are: Project Self, a series of non-credit support groups and workshops on topics such as history of women, creative expression, personal growth; local community workshops (largely vocational) for women not able to attend workshops on cappus; creation of support groups for women, according to interests and life situation; academic, vocational and personal counseling; a program for non-professional university staff women including skills courses, crafts workshops, auto mechanics workshop, educational opportunities workshops and a noontime general awareness lecture series. Other activities of the Center include special conferences, such as the one held for one week in January 1973, which offer short workshops, lectures by outside speakers, films and discussion groups. The Center provides day care services for children of participants.

The newly created Continuing Education for Women oversees all women's programs in the Division of Continuing Education. Projected plans include the development of a compensatory reading and writing course for women; creation of an apprentice program; creation of a Department of Feminist Studies at the University (this proposal is currently being studied by the Feminist Studies Committee); a scholarship fund which would provide financial aid to women wishing to participate in continuing education activities.

Bay Path Junior College is the only private institution in this region which reported any concern for special programs or courses for women. Bay Path has no continuing education at present, but has planned to institute a continuing education program for community women. Based on the interests expressed by women in the community, the projected program will include a liberal arts program leading to an Associate of Arts degree, and Child Study and Mental Health Associate Programs both leading to an Associate of Science degree.

Central Region

Very few of the institutions in this region have created or are planning to create special programs for women. Mt. Wachusett Community College, the only public institution in this region which reported any steps in this direction, is planning for a day care center on campus for children of students.

Two private institutions, Assumption College and Clark University, offer several courses of interest to women. At Assumption, an Abnormal Psychology course is offered, at no charge, to disadvantaged mothers and professionals working together in Head Start programs. Clark's Mini Program, a series of non-credit workshops and courses given during the three week semester break, offers two courses on the subject of women: "The Psychology of Women" and "Women's Liberation".

Northeast Region

All of the schools in this region which offer special programs or services to women are public. North Shore Community College, through its Community Service Division, offers several noncredit workshops for women: "Images of Women in Literature" and "Women's Career Exploration and Planning": The latter, a seven-week program given in both Fall 1972 and Spring 1973, offers women the opportunity to set employment goals and to create plans for reaching these goals. A similar one-day workship was offered in Spring 1972; the objective was to acquaint women with educational and employment opportunities in the North Shore area. In May 1973 the college sponsored a "Contemporary Women's Lecture Series," held at the local shopping center. The three lectures centered on the issures of women's roles in American society. Most of the women who attended the lectures were housewives interested in reevaluating their roles, or seeking information on current trends among American women with respect to changing roles.

At Northern Essex Community College, "New Directions for Women" was a series of five discussion workshops offered in Spring 1973. Workshop participants assessed their skills, talents and availability for return to school or work, and examined career training programs and other creative job possibilities. In February 1973, a one-day "Conference for Women" was jointly sponsored by Northern Essex and the Andover Women's Center. The conference dealt with issues and problems of doubling as a wife-mother/student-worker--getting into college, finding a job, job training opportunities for women, age considerations, scheduling time, the low prestige of volunteer work. In addition to these workshops, a credit course in "Women in Literature and Life" is offered.

Following the model pioneered by Northeastern University with its adult day programs for women, Northern Essex intends to offer more part-time programs with more flexible hours to accomodate the needs of housewives and mothers. Both Northern Essex and North Shore are planning day care services for children and students.

Forty percent (40%) of the continuing education enrollment at Middlesex Community College are middle class women, between the ages of 30 and 50, seeking training and credentials for professional work. Accordingly, several Special Programs designed to meet these needs have been created. The Social Work Associate program trains suburban housewives to work as paraprofessional aides to social workers. Graduates of this program receive a certificate. A similar program, in Early Childhood Education, trains women to work as assistant teachers in nurseries and day care centers. Graduates of this program are also awarded certificates. The Women's Opportunity Research Center offers vocational and educational guidance to women of all economic classes. Services provided by the WORC include: counseling, testing, speakers bureau, clearinghouse on community agencies and resources, information distribution, M.C.C. Job Bank, exchange of volunteer work for M.C.C. Continuing Education course tuition, news column. WORC courses and workshops cover the following areas: self identification; study and job application skills; education; part-time work; health, business and human service careers; leadership training; women in history and literature. Similarly, the Opportunity Open House provides resources for women to explore the full dimension of educational, employment and volunteer opportunities.

Salem State College has two Special Programs of interest to women. The Day Care Training Institute, under HEW, provides professional training for welfare mothers in the area of child care. The Service Program for Salem Hospital School of Nursing offers college level study in liberal arts for prosepctive registered nurses.

Southeast Region

Bristol Community College offers a Bi-lingual Secretary Program for immigrants to develop typing and shorthand skills. Both Bristol and Cape Cod Community Colleges are planning to institute day care centers for children of students. Massasoit Community College offers a program in Child Care to develop and upgrade educational personnel and community awareness. A "Women's Conference on Occupations and Education" was held in Spring 1973. Speakers and workshops dealt with such topics as "Being a Housewife and Having a Career Too!" "Job Opportunities in the Greater Brockton Area," "Educational Opportunities in the Area," "A Time to Voice Your Needs." The conference was open to anyone from the community.

Boston Region

Educational opportunities for women in the Boston area are more extensive than in any other region. The following institutions and groups reported activities or programs designed specifically to meet the part-time or continuing education needs of women.

All but one of the students in Garland Junior College's part-time co-op program are women in their early 20's to mid-40's. Students in the program are trained to be family change agents; general education courses are taken at Garland, early childhood courses at Wheelock, and specialized training is provided by medical personnel at the Columbia Point Health Center. Students receive an Associate of Science degree from Garland. Garland hopes to provide other part-time career-oriented programs for mature women. Although the school would like to attract women from low income families, financial aid resources are scant. Such new programs, then, would most likely appeal to more affluent women. In addition, future plans, dependent largely on available funds, include provision of individual and group counseling and day care services.

Special continuing education programs at Lesley College include: a "Child Growth and Development" course for Central School mothers; college credit courses for paraprofessional groups including Boston teacher aides and Title I mothers.

The Continuing Education program at Jackson College Tufts offers a BA degree in Liberal Arts to urban and suburban women who have had community or work experience. Fifty percent (50%) of the women are urban, low-income women on scholarship. The other fifty percent are middle class, predominantly suburban. Also at Tufts, the College of Special Studies Continuing Education program offers courses in education. Most of the students are white, middle class women, with families (average age: 35) seeking a degree in teaching. The program grants a BS in Education.

The Wheelock College Continuing Education program offers several Special Programs for women. The Supplementary Training Program offers paraprofessional community workers the opportunity to develop their careers and increase their on-the-job competencies. Students in the program work in Cambridge, Lynn and Brockton Headstart Programs, Cambridge Follow-Through, and selected day care centers in Boston. Ninety-five percent (95%) of the students are women, 50% are black, and all are poor. They are all interested in working with children, follow the same course of study, and receive continuous counseling. The Division of Employment Security has contracted with Wheelock to provide courses for approximately 15 WIN mothers. The goal of this program is to open job opportunitu options for low-income women. Because Wheelock is not able to provide large financial aid grants to students. Many of their low income clientele come to Wheelock through government funded programs.

At Boston University's Metropolitan College courses are offered in "History of Women in the U.S." and "Psychology of Women." The School of Social Work at Boston University has a part-time program for married women; a master's degree can be earned in 2-3 years of part-time study and one full-time year.

The Open College at Pine Manor Junior College is a continuing education program for women who wish to begin or resume their education. Open College students can enroll in regular undergraduate courses for full credit; in addition, they may choose to elect full credit liberal arts seminars created for Open College students. There are no admission requirements for seminars, but Open College students must meet requirements and prerequisites for regular college curriculum courses. Educational counseling and testing facilities are available. One positive outcome of the pilot year of Open College was mixed age classes; that is, mature women from the Open College and young women from the Junior College taking the same courses. Based on these results, the Open College has received a $30,000 grant from the National Endowment for the Humanities to produce recommendations for "mixed age" education.

Harvard University Extension offers two special courses of interest to women working in day care: a "Practicum in Day Care" and "Management and Administration in Day Care Centers." In addition, a course in "Women in Literature" is offered.

The Radcliffe Institute provides a number of educational services for women. The Program for Independent Study offers part-time fellowships to gifted and qualified women who wish to pursue research or other activity in their fields. The Program for Women in Medicine offers part-time support to women physicians interested in completing their training or pursuing specific interests, but unable to meet the rigorous time demands of full-time hospital duty. A third fellowship program is open to women enrolled part-time in graduate degree programs in institutions in Connecticut, Rhode Island, and Massachusetts. Stipends can be used for tuition, books or child care. The Radcliffe Seminars offer courses covering a wide variety of topics and are directed primarily to college graduates or women with comparable interests and experience. Over the past few years a trend away from academics toward vocational interests has been noted in the motivation of Seminar students. Certain Seminar courses may be taken for undergraduate credit toward the Harvard AB in Extension Studies. Two programs within the Semimars are geared to professional training. The first is a program in environmental and landscape design. The second, consisting of four courses in the field of day care, was developed in cooperation with the Division of Maternal and Child Health of the Massachusetts Department of Public Health. Students who complete this special program are qualified to teach in or administer licensed day care centers. The Guidance Laboratory provides counseling services to women in the Boston area who are interested in resuming study, working part-time, or developing new interests. Counseling is available to women not otherwise connected with the Institute. In addition to offering seminars in child care and development, the Institute has assumed budgetary responsibility for the three day care centers established by Radcliffe College in 1970.

In its latest statement on Continuing Education for women, Suffolk University invites mature women to apply for admission to day courses on a part-time basis. The objectives of the part-time program are to provide preparation for professional careers and to provide refresher courses for women whose formal education has become dated or who wish to prepare for a new career. Several courses are now offered on topics such as "Thinking About Women," "Psychology of Women," and "Women in Contemporary Society." Counseling services are provided by the Admissions Office, the Transfer Student Counselor, the Department of Psychological Services, the Committee on Continuing Education for Women, and faculty Advisors. Mature women may take day credit courses at a prorated tuition charge.

The Center for Continuing Education at Newton College offers women opportunities to enroll in the regular undergraduate program on a part-time basis, to take one course for credit or personal enjoyment, to enroll in a six week, one day/week seminar, or to audit a course. One particular course of special interest to women is a study-internship program "Women in Political and Governmental Careers." For the first two months, participants engage in intensive seminars which focus on the complex problems at all three levels of government. The following four months (16 hours/week) is spent in field work at various government agencies or with state legislators. The program is designed to educate women in the intricacies and realities of the political world, and to expose them to job possibilities.

Community Centers

The Study Group on Continuing Education for Urban Women was established in 1971 under a one year grant from the John Hay Whitney Foundation with the assistance of the Women's Action Alliance and in cooperation with Tufts University. The objectives of the study group were to identify the higher education needs of inner-city women, to evaluate existing programs in the light of these needs, and to encourage the development of new and more responsive opportunities for such women in the Boston area. The attempt was made to involve a wide range of Boston-area institutions in dealing with these problems. The results of the study have been articulated in a paper by the director of the study group, Suzanne Lipsky, entitled "Inner City Women and Higher Education: An Overview of the Work of the Boston Study Group on Continuing Education for Urban Women." At a recent conference of the Study Group held at Boston University, several plans were made to insure the development of educational programs and services for inner city women. The Women's Inner City Resource Service has been established to serve as a clearinghouse and advocate for women wishing to go to college. A council on higher education for urban women, comprised of college administrators and other influential persons, is able to serve as a "foot in the door" in aiding urban women who seek admission to educational programs. Finally, the conference sanctioned the compilation and publication of a directory of educational programs presently available to urban women.

The Newton Community Service Center offered, in Spring 1973, a one-day workshop "Conference for Women." The workshops covered such topics as: "Choice of New Career," "The Identity Crisis," "Going Back to School," "Creative Volunteering," "Job Market in Health and Social Services," "Child Care and Managing the Family," "Interviewing and Resume Writing." Such a wide variety of workshop topics appeals to women with varying concerns and needs.

The Adult Education Centers in Boston and Cambridge offer several courses of interest to women. At the Boston Center, "Topics at a Town House," a lecture and panel series, sponsored two events; one on "What Women Want" with representatives of different women's organizations, and the second, "Should a Girl's Education be Different from a Boy's?" Two courses, "Emerging Sex Roles" and "Masculine-Feminine Images in Contemporary Literature" are also offered. At the Cambridge Center the following courses are offered: "The Changing Consciousness of Women--Liberation How?" "On Being a Woman," "Liberation: Who's Doing What to Whom?" and "Metamorphosis of Eve." The Cambridge YWCA offers courses for women only.

Conclusion

Many institutions across the state offer educational opportunities and supportive services to women. At many schools however, academic and training programs designed specifically for women are in those fields which have been traditionally women's fields--education, social work, nursing, office work. Professional training programs in business, law, medicine, and academic fields, and vocational training in the trades are almost non-existent. At other schools, supportive services, such as those mentioned above, one-day workshops and conferences, and non-credit personal interest courses, comprise the "women's" programs. These trends raise questions as to whether institutions are prepared to provide equal educational opportunities to both men and women, or whether the programs currently being offered are channelling women into traditional roles and occupations.

III.C.3. Disadvantaged

Degree-granting Institutions

Western Region

All of the institutions in this region which reported programs and services for the disadvantaged are public. Greenfield Community College offers two free continuing education courses for disadvantaged students: 1) General Equivalency Diploma preparation for WIN mothers and non-high school graduates, and 2) new skill training in typing for WIN mothers. The college would like to offer more vocational and occupational courses for the unemployed and under-employed in the future.

Holyoke Community College offers several special programs for disadvantaged students. The Community Service Aide Program, in conjunction with Holyoke Model Cities, provides paraprofessional training in the delivery of services to the disadvantaged community for employees of community agencies. A second program trains local housing project residents to operate their own resource center. A new program in Corrections offers two courses, "Correctional Counseling" and "Probation and Parole," to Berkshire County Correctional personnel. The Title III Audio Tutorial is another program listed by Holyoke "to train disadvadvantaged students." The college would like to reach more members of the Spanish and minority communities, through the use of Cable TV courses and credit by examination; extension of services into these communities is limited, however, at present by lack of funds.

Springfield Technical Community College reports two special programs for their disadvantaged students. The Student Development Program is designed for students who need further academic assistance to develop college-level skills in Math, Reading and Science. The Special Student Services program, to begin in July 1973, will offer counseling, modular skill courses, and "English as a Second Language."

Two programs at the University of Massachusetts at Amherst are designed specifically for disadvantaged students. The Career Opportunities Program is available to off-campus minority groups in COP areas--Worcester, Springfield, Brooklyn--who would not otherwise be able to study at the college-level. Students work at field sites and take courses through the University of Massachusetts toward a BS in Education. Support services are provided by a number of agencies, including Model Cities, Welfare, Headstart, and Titles I, IV, VI, VII. The New Careers Training program (Typing I) offers on-the-job training in typing and stenography for under-employed persons seeking paraprofessional positions.

Central Region

Quinsigamond Community College reports a number of programs for disadvantaged students offered through the Center for Continuing Education and Community Service. Courses in "English as a Second Language," "English Communication Skills," and "Science of the Physical Earth" have been prepared as a package for students in the Career Opportunities Program. Early Childhood Education courses are given for the Headstart Public Service Careers Program. Special counseling is available for recipients of federal aid under the Emergency Employment Act. "S-ALL" is a community service program designed to "upgrade and educate groups of disadvantaged students...with the full cooperation of the evening and summer division of our Center." In addition to the programs described above, Quinsigamond has contracted with agencies (Manpower Development Training Act, Headstart, Career Opportunities Program) to offer courses in "Early Childhood," "Public Health," "Group Dynamics," "Principles of Social Work," and "Community Resources." The courses are designed to upgrade the skills of employees of these agencies. Several of the courses meet on agency premises. Despite the variety of programs for disadvantaged persons, Quinsigamond argues that it is not really reaching the disadvantaged, delinquent, and Spanish-speaking segments of the community, and that until new funding sources become available, services to special clientele will be limited.

The Worcester Consortium for Higher Education is a collection of cooperating colleges, libraries, museums, centers, and groups in the Worcester area. Responding to the influx of Spanish-speaking children into the Worcester Public Schools, the Consortium created the Hispanic Aid Project, through which member colleges give courses in functional Spanish to public school teachers.

Framingham State College has instituted a training program for prisoners in cooperation with Norfolk State Prison. Prisoners who are to be parolled within eighteen months are trained as Human Service Technicians at Mefield State Hospital. Courses in this program are given through Framingham State College.

A course in "Interpersonal Relations," in Teams for Learning program at Worcester State College is given at the request of the Career Opportunities Program Administrator and Title I Director in Worcester. The course is designed to help teachers, aides and administrators better understand their roles in the total educational program. Several credit courses, requested by the administration of Head Start, are offered to Head Start personnel. These include "Training Workshop for Child Development," "Child Psychology," and "Creative Arts for Young Children."

Assumption College, at the request of the Federal Child Study Program, offers a course in "Abnormal Psychology" for disadvantaged mothers and professionals working together in the Head Start Program. A three-day workshop in Early Childhood Development, for disadvantaged persons training to become teachers' aides in the Worcester School System, was held in December 1971. In addition, in 1972 Assumption College's Institute for Social and Rehabilitation Services held three conferences for professionals working with disadvantaged clients. The topics of the conferences were: "Cooperative Planning of Social and Rehabilitation Services for Disabled Public Assistance Recipients," "Occupational Information and Placement," and "Training Institute on the Rehabilitation of the Alcoholic."

Clark University reports that it has failed to attract minority and low-income students, perhaps due to the academic nature of its programs and the length of time required to complete them. Off campus locations, such as storefronts, churches, neighborhood centers, jails; and new techniques, such as videotapes, films, closed circuit TV, cassettes, would enable Clark to reach into the ghetto, and bring the university to the residents. The major obstacle to implementing this approach is the funding necessary for equipment, salaries and scholarships.

Southeast Region

The three community colleges in this region--Bristol, Cape Cod, and Massasoit--which reported continuing education programs for disadvantaged students all offer GED courses for those who wish to attain a high school diploma. Both Bristol and Massasoit offer "English as a Second Language"--Bristol to Portuguese immigrants, and Massasoit to Portuguese and Spanish immigrants. Bristol also has a Bilingual Secretary Program for disadvantaged immigrants who wish to develop secretarial skills. Massasoit has a number of programs in addition to those noted above. The New Careers Program, the result of contracts between the college and social service agencies, fulfills the educational needs of local agencies. The Human Resources Social Service Program, an outgrowth of New Careers, trains disadvantaged persons to work as Social Welfare Assistants. The Self-Development Program for low-income students is designed to increase student awareness of educational and job options and requirements and to aid them in undertaking self-directed study. Consumer Education and income tax preparation course are available to disadvantaged students. A course in secretarial and stenographic skills is offered to handicapped persons. In addition, tutorial assistance is available to students having difficulty with their studies.

The only private institution to report any special program for disadvantaged students was Dean Junior College which will be instituting a GED Program in Fall 1974.

Northeast Region

The two colleges in this region reporting programs for the disadvantaged were Northern Essex Community College and Middlesex Community College. Northern Essex gives courses in "Child Psychology," "Surveying," "Introduction to Library Science," "Adolescent Psychology," "Conversational Spanish," and "Shorthand," to participants in the Emergency Employment Act Program. A GED preparation course and several courses in English as a Second Language are also offered. Students may take "Intensive ESL" five days/week for three hours each day, or "Minimum Level ESL" two days/week for two and a half hours each day. Similar to other community colleges in the Commonwealth, Northern Essex reports that it is not adequately serving the needs of the poor and Spanish-speaking community and would like to prove that a community college is open to all "regardless of ability to pay" by providing financial aid to students. However, as in the cases of other schools mentioned above, funds are not, at present, available for these purposes.

Thirty percent (30%) of the Continuing Education Clientele at Middlesex Community College are poor blacks and Puerto Ricans enrolled in courses contracted by community agencies. Paraprofessional training in Human Services is offered through New Careers and Model Cities in Lowell, the Cambridge Community Learning Center, and Action for Boston Community Development. Training in Early Childhood Education is offered through Head Start programs in Cambridge and Lowell. The Youth Services program provides guidance to school dropouts and court-judged juvenile delinquents. Despite the fact that 470 students are involved in these programs, Middlesex reports that it is not adequately reaching special clientele, perhaps because tuition for their continuing education courses is too high.

Boston Region

Two public institutions in Boston report programs for disadvantaged students. Boston State College has two bilingual programs: "English as a Second Language," given in Cambridge and Jamaica Plain, is designed to equip Spanish-speaking students with enough English to "cope with the business of everyday life." The course in "Spanish GED and English Preparation" prepares students to take the GED examination in Spanish and to go on in developing English skills. The "GED for Adults" course provides students with sufficient skills to pass the GED examination. The purpose of the Program to Alleviate the Minority Urban Teacher Shortage is to identify minority persons interested in teaching in urban areas who do not have teaching certification, and to offer education courses so that certification may be obtained. Boston State reported two programs to be instituted in Winter of 1973: 1) a program to train minority school administrators, and 2) Prisoners Released Time Education Program, an undergraduate degree program for Deer Island inmates. Boston State also plans to expand existing programs and create new ones for minority and disadvantaged students. Details of new programs were not reported.

The University of Massachusetts at Boston has planned the College of Public and Community Service to increase its service to low income clientele desiring an education. Graduates will be qualified to work in and advocate for the delivery of human services in urban areas. The college will recruit, for its first year, 300 full-time equivalent students; as the programs develop and become more cohesive, a larger number of non-degree and part-time students will be accepted. A wide range of socio-economic backgrounds, age, and experience will be sought. Particular attention will be given to older persons experienced in the field of human services, who need further skills, knowledge and credentials. Twenty-five students will be admitted to the first year without having ever received a high school diploma or equivalent. Other students will be local agency personnel granted released time for study. The curriculum will incorporate field work experience with on-campus learning, supplemented, when necessary, by skill workshops and courses. Another program, planned by U. Mass. - Boston in cooperation with the Massachusetts Department of Corrections, was scheduled to begin in Spring 1973. This program would offer prisoners the opportunity to take courses at the U. Mass. - Boston campus on a part-time basis.

Four private institutions reported programs for disadvantaged students. Metropolitan College at Boston University states that it has "ties with the local rehabilitation agencies, with the prisons, with the Black and Spanish communities. MET has the highest number of Spanish-speaking students in the entire university." The only example cited of a contractual agreement with an agency was with the WIN program in Malden. Specific details of this program were not reported. Two other programs designed for inner-city minority students are in "Community Mental Health" and "Basic English Skills for College Preparation."

Fifty percent (50%) of its Continuing Education students, reports Wheelock College, are poor and black. The College is not able to reach all disadvantaged persons interested in studying early childhood education because of limited funds. Most of the disadvantaged students at Wheelock come from government funded programs which have contracted with the school to provide educational and paraprofessional training courses. Accordingly, the Division of Employment Security, and personnel from Headstart programs in Lynn, Brockton, and Cambridge, Cambridge Follow through and certain day care centers in Boston have enrolled in the Supplementary Training Program in Early Childhood Education. The Division of Employment Security has also contracted with Wheelock to provide courses for WIN mothers who wish to explore and open new job opportunities. Similar courses have been contracted by Cambridge Model Cities. Wheelock offers courses in Early Childhood Education on a part-time basis to participants in the Career Opportunities Program.

Regis College offers, on a part-time basis, Spanish courses for public service personnel who work with the Puerto Rican community. Lesley College has a continuing education program in which paraprofessional teachers' aides from the Boston Public Schools take courses for college credit in English, Psychology, Education and Math.

Adult Education Programs

Several of the courses, given through the Bureau of Adult Services, Massachusetts Department of Education, are designed for disadvantaged adult students. The High School Equivalency Preparation is a 15 session review course in English grammar, Arithmetic, and Reading Comprehension. The course does not teach skills, but is designed as a review for those people who have been out of school for a number of years. Adult Basic Education is for illiterate and under-educated adults; the curriculum is designed to develop elementary level (grades 1-8) communication and computation skills, and also civic, economic, social and occupational understanding and concepts necessary to function as effective producers and consumers in contemporary American society. Classes in Adult Civic Education are held for adults who are unable to speak, read or write English. The curriculum is designed to develop basic language arts skills for those learning English as a second language, and also. to prepare non-citizens for the naturalization exam. Inmates of state and county correctional institutions may enroll for free instruction through the Bureau of Adult Services Correspondence Courses.

The Boston Public Schools Adult Basic Education Program is designed to: enable students to obtain an eighth grade diploma; encourage some to continue through day or evening high school to obtain a full high school diploma; guide others through a basic course of study leading to a high school equivalency certificate; teach non-English speaking adults to speak, read and write English. The primary objective of the program is to reach adults functioning at or below the fifth grade level, and to provide an opportunity for them to acquire basic communication and computation skills. Courses are individualized, and tailored to individual students' needs and goals. Personalized instruction is supplemented with a wide variety of audio-visual aids.

Conclusion

Although a number of institutions throughout the Commonwealth do offer educational programs and courses for the disadvantaged, existing programs as reported are limited in kind--English as a Second Language, paraprofessional training in social services, education, vocational training, and GED preparation constitute the great majority of such programs. Professional training for the disadvantaged in medicine, law, business and academic fields is conspicuously lacking. In addition, supportive services--counseling, financial aid, day care, outreach--are provided to a very limited extent. These trends suggest that both public and private institutions have not made a serious commitment to provide opportunities in higher education, at all levels in all fields, for the disadvantaged population in the state.

BEST COPY AVAILABLE

BEST COPY AVAILABLE

IV. DEMAND FOR CONTINUING AND PART-TIME POSTSECONDARY EDUCATION IN MASSACHUSETTS

A. The "Market" for Continuing and Adult Education. IV-3

B. Participation of Adults in Part-time Educational Activities IV-13

C. Licensing and Other Proposed Incentives for Continuing Education IV-37

D. Continuing Education and the Economy IV-41

E. Factors Influencing Demand for Continuing and Part-time Postsecondary Education in Substate Regions in Massachusetts IV-52

F. Estimating the Demand for Nontraditional Learning and "Open Universities". .IV-69

BEST COPY AVAILABLE

A. The "Market" for Continuing and Adult Education

Demand IV-3
Supply IV-4

THE "MARKET" FOR CONTINUING AND ADULT EDUCATION

In a simple market for goods bought by consumers and produced and sold by firms with no subsidies involved, the value of the goods or services to consumers will equal the cost to society to produce them. An equilibrium of supply and demand will reflect consumer preferences in the face of real cost choices. However, the market for continuing and adult education is not a simple one. The nature and extent of program offerings and enrollments is determined by a complex system of demand--individuals, employers, and governments and supply--participating institutions and State agencies and demand and supply do not reach equilibrium through impartial market forces. This market is significantly complicated by several factors.

First, general government subsidies and institutional subsidies from the part-time to the full-time programs (and vice versa) are involved; thus, the real costs of the programs are not charged to the student consumers. Second, the institutional response is not from profit-making firms but from the opening of new campuses in the State and community college systems or from expanding or new programs. The opening of new campuses is based on long-term political decisions involving other variables than the needs for part-time or continuing education. Third, the demand for continuing education is to some extent created as new programs open. People may not be aware of an interest in continuing education until programs are opened and people they know are taking them. In this sense, supply creates its own demand.

Finally, needs for adult education are varied and extensive, and continuing education programs in degree-granting institutions serve only a portion of the total adult needs. Other types of institutions, primarily proprietary institutions, correspondence schools, and adult evening centers also participate in this market for academic, vocational, professional, and noncredit avocational courses.

Demand

The demand for adult and continuing education has at least three sources: personal, employer, and government or societal. Demand from individuals has several motivations: 1) as a personal consumption good--that is for the satisfaction of learning and socializing; and 2) as an investment good for job advancement with a degree or specific vocational training. Employers are interested in vocational training courses for employees. Governments are interested in manpower training to ease labor shortages, contribute to productivity, and aid the disadvantaged, and in general education to elevate the citizenry.

Over the last ten years demand for adult and continuing education has grown at a much faster rate than population. In 1957 one in thirteen adults was involved in some form of adult education classes; in 1973, one in eight.[1] Increase in demand probably is a function of a number of societal trends: more leisure time, greater affluence, high minority aspirations, women's liberation, changing job requirements, student disaffection with the traditional full-time, day, 9-month model of higher education. A newly emerging market of students wants a second chance at education, both as a consumption good and as an investment in their economic future. High school or college dropouts trying again to finish a degree, the unemployed wanting to gain new job skills, housewives with more free time or hoping to return to a career, minorities pushing harder for upward mobility, and average citizens expanding their leisure-time interests comprise this new clientele for continuing education.

The demand for vocational certification has grown as our labor force has become more credentialled and our economy technically complex and service oriented. The labor market may be pictured as employers choosing workers as needed down a queue of best to least-educated. Consequently, incentives are strong for education and training to meet formal standards and job requirements. In the past ethnic groups, and now Blacks and women, have come to see education as a way out of second-class working conditions. Governments, state and federal, have also supported education as a means of getting the "disadvantaged" off welfare rolls.

Much of the increase in demand over the past several years has been for noncredit avocational courses not for academic or general education. Avocational courses are now a recreational activity, likened by one student to playing golf. Particularly in towns where adult education activities have been publicized and have attracted community fanfare flourishing programs exist. Such interests may be faddish. A few years age courses were popular in black culture or women's liberation. Interest has since dropped in those subjects and current attraction is for courses in ecology and yoga.

Supply

The response of suppliers to these increasing demands has been varied. Currently, the degree-granting colleges and universities are meeting only about 25% of adult and continuing education enrollments.[2] Traditionally, many private colleges and state university systems have provided adult extension programs of classes and correspondence in academic and vocational fields at the bachelor's and madter's degree level. More recently, public community colleges have taken an aggressive posture to serve community needs and claim to offer whatever people want--be it yoga or breadmaking. Thus community colleges have become involved in vocational training at the associate level and in noncredit courses of popular interest. Generally part-time and continuing education programs have had open admissions and are administratively and financially separated from full-time programs.

Beyond evening or extension offerings, however, institutions are now experimenting with "nontraditional" programs to reach groups previously excluded from colleges by virtue of age or socioecomomic position. In part this interest in new sources of students may be explained by faltering enrollments in the full-time, 18-21 year old category of students. The degree-granting institutions cannot respond easily to market conditions by cutting back on services because their faculty are to a large extent tenured and cannot be fired, and their physical plant is extensive. New clientele groups of students have, therefore, become an increasing necessity. Another impetus for nontraditional programs comes from the social pressure for equalizing opportunity and giving adults a second chance at a career. Regardless of changing political swings in the country, there is an underlying assumption that equal opportunity for achievement of education as an investment good be provided to those who are interested. With educational and training assets, the disadvantaged may compete favorably in the job market. The government has, consequently, come to support a variety of new programs in the regular, not evening, structure of degree-granting institutions.

Colleges and universities are, however, limited in responding quickly or sufficiently to changing demands, and this is particularly true for part-time or continuing education needs. Most of these institutions still regard as their primary student clientele the full-time undergraduates and graduate students, not the part-time students. Even more significant, however, are the complex of other purposes and goals of these institutions which may be in conflict with the objectives of serving students, full or part-time, and the complex of sources of funds and subsidies which mute the forces of competition in the market.

Since World War II many expectations have been made of higher education as a force for varied social and ecomonic goals. In addition to meeting objectives of creating an educated class of citizens, carrying on research and graduate instruction, and providing for equal opportunity as discussed above, institutions have been advising governments and foundations on a broad range of social, economic and scientific fronts and serving as an input to the gross national product through the exercise of scientific, technical, and managerial skills.

Financial sources reflect this complex of goals and activities. In 1969 tuition from students played a relatively minor role in financing: 27% of educational and general revenue. Government subsudies in the form of direct grants or research support comprised 52% (17% federal and 39% state). Alumni contributions and endowments comprised 7%.[3]

This intricacy of goals and sources of financial support insulates higher education from direct involvement with students in a market; that is, from fierce competition for students. When there are forces created by students for change how does the institution in its current form respond? Although there are incentives for administrators to reform, either pressures from students or increasing financial constraints, they have little power over faculty organization and teaching. The faculty feels but indirectly the pressures of students and costs and may find other goals such as professional status more important than student satisfaction. To advance in their career they must 'publish or perish'. Research and writing is of necessity along narrow, specialized lines. For example, to teach interdisciplinary material or devote greater time to independent study or team teaching in an effort to meet student needs diverts time and energy from professional work. Higher education, as law or health care, has strong elements of professional control over production. It is not clear that the interests of the students as consumers are shared by these professionals who shape higher education.

How does this general description of higher education relate to part-time and continuing education programs? In some instances, these programs are administratively captured by this higher education system; in other cases, they are free of the larger goals and structures of institutions. Part-time students in full-time programs are closely tied to the existing structure of programs since they participate in the broad range of full-time offerings. Even graduate programs which are largely for part-time students, such as education and business, are organized as full-time programs are. In particular, accrediting agencies require that a high percentage of their faculty be full-time. These graduate programs thus tend to be the most conservative among the part-time programs in meeting changing student needs.

Certain continuing education programs, however, thrive in a situation of great flexibility and independence from the main body of the institution. Continuing education divisions particularly in the community colleges may have discretion without regard to restrictive accrediting standards to offer courses in which students express an interest. The continuing education director, more than any other individual in higher education, may be regarded as an educational entrepreneur. Under conditions of receiving an indirect institutional subsidy in the form of office and classroom space, and often a requirement that a certain percentage of receipts be turned back to the institution's full-time program, the continuing education director may as he wishes juggle courses and students to balance the books. He may hire part-time faculty from inside the institution or adjunct faculty from other professions at fees lower than in the full-time day program. He can hire or fire this faculty on short notice, as demand rises or falls in total or in specific areas. He may advertise a wide variety of noncredit courses to test student demand, and then offer only those which will pay for themselves with high enough enrollments.

Many continuing education directors have this discretion to expand programs to meet demand and have the flexibility to test the market for areas of high interest. Part-time and continuing education programs can, therefore, have a degree of autonomy from the institutions in which they are housed.

The supply response to consumers' preferences is in the aggregate, however, by no means perfect. Institutions do not necessarily open or move in response to changing needs. Whether a population is adequately served may depend on whether private institutions are close and have appropriate programs, or whether the public systems will open new campuses in the area.

In Massachusetts, enrollments in continuing education have expanded rapidly over the last 10 years, though they have not in part-time-in-full-time programs. Much of this increase can be explained by the opening of new community college campuses across the State and the expansion of State college programs. Rnrollments in private college programs have in some cases dropped under competition from lower-priced courses in the public institutions.

Proprietary institutions, in contrast to colleges and universities, do respond to market conditions of demand as firms in a typical market. Their survival depends solely on the favorable response of students to their programs and they are more conscious of having to "sell" their product on the market. Because these institutions have no tenured faculty, they are able to expand and contract with rising or falling market demand. Being small, the cost of entering the market is low and new proprietary institutions enter the market easily. No other goals of research or public service and no other sources of financial support complicate their activities.

In Massachusetts about 250-300 proprietary or independent institutions are in operation each year. New schools are formed in response to rising student-market trends such as in data processing, and schools will close when demand falls. A conservative estimate is that about 9% of the schools in operation are new each year. Proprietary institutions are often the first to offer new courses or new fields of interest. Two or three years later degree-granting institutions may follow suit. (See Section II.N.(1).)

Proprietary institutions have been offering courses comparable to community college level work in four areas: business, trade or technical, barber/cosmetology and allied health. Traditionally the proprietary institutions have offered tightly organized programs of strictly vocational work over a short period of time with higher fees than comparable community college programs. Estimates vary for full-time and part-time attendance from 1.5 million to 9.6 million per year in total in the U.S.[4] Proprietary institutions offer part-time or evening programs to bring in extra dollars and utilize the existing space beyond conventional daytime class hours. Enrollments in such programs are generally small; the percentage of part-time students is less than in the community colleges.[5]

Correspondence or home study schools offer courses in specialized occupational fields for those who prefer to study at home or cannot leave the home. They do not have the authority to grant degrees. It is estimated that nationwide their enrollments are about 5.7 million.[6] In Massachusetts a combination of nationally-run correspondence schools and local programs operate. Sixteen schools are state-licensed with enrollments over 6,000 a year. Added to this population are enrollments in nationally-operated correspondence schools.

In the occupational sphere there are a wide variety of other educational activities carried on outside of educational institutions. Business and industry training provides a significant percentage of adult learning, but most of it is informal, on-the-job training. Formal training is largely at the professional or management level. Courses may be held in-house or contracted out, or subsidies may be given to employees to take courses in educational institutions.

Governmental agencies in the last few years have also developed a variety of programs of manpower training. In contrast to business and industry training, these programs are in large part for technical and trade skills aimed at upgrading skills of the disadvantaged populations.[7]

A variety of institutions offer noncredit courses to adults. The adult education programs of the public schools are primary in this area. Originally designed for basic education and education of immigrants with low education, these programs have since come to serve the leisure-time interests of adults in addition to adults needing high school credit courses. These programs may receive financial support from both the local community and the state. Administrative costs are low since courses are noncredit, and there is no need for record-keeping, and thus fees charged are low--from $5 a course.

In Massachusetts, historically, adult education programs have been required in towns over 50,000. School boards are notably independent-minded in Massachusetts, and there is little cooperation with the State Department of Education, although there is State support for certain practical arts courses. The school systems are not entirely free to offer what they might wish, however, since fees are limited by the State to a low figure which might not support certain courses.[8]

Many of these programs maintain their traditional character of offering high school credit courses and practical arts or homemaking courses. However, the system is generally flexible enough to be changed. Directors of such programs may, if they wish, assume an aggressive stance in expanding their programs into new areas. They may offer new courses if they can attract enough students with effective publicity. Once people in the community begin to hear about such programs from their friends, enrollments may expand substantially. Worcester and Springfield have extensive programs in noncredit areas. They also have training programs in cooperation with local industry and manpower agencies.

Boston and Cambridge have unique forms of adult education--private, non-profit adult education centers. Enrolling thousands of students each term, they offer a wide variety of "esoteric" courses from yoga to auto mechanics to fine arts and music and to psychology and political science. Fees range from $5 to $100.

Other civic or religious organizations such as YMCA's and YWCA's, churches, and youth centers also offer low cost courses for adults.

Footnotes

1. "Back to School for Millions of Adults" U.S. News and World Report, April 2, 1973. p. 73.

2. Okes, Imogene E. Participation in Adult Education: Initial Report 1969, National Center for Educational Statistics, Washington, D.C. 1971, p. 19.

3. Digest of Educational Statistics, 1970, National Center for Educational Statistics, Office of Education, p. 67.

4. Wilms, Wellford W. "A New Look at Proprietary Schools", Change, Summer 1973, p. 6 and Stanley Moses, "Notes on the Learning Force" Notes on the Future of Education, February, 1970. (Syracuse University), p. 3.

5. For analyses of proprietary institutions and similar community college programs, see:
Erickson, Edward W. et al, Proprietary Business Schools and Community Colleges: Resource Allocation, Student Needs, and Federal Policies, ICF Incorporated, Washington, D.C., 1972.

   Wolman, Jean M. et al, A Comparative Study of Proprietary and Non-Proprietary Vocational Training Programs, American Institutes for Research in the Behavioral Sciences, Palo Alto, Calif., 1972.

6. Moses, op. cit, p. 3.

7. For an analysis of occupational education in Massachusetts, see:
Schaefer, Carl J. and Jacob J. Kaufman, Occupational Education for Massachusetts, Massachusetts Advisory Council on Education, June 1968.

8. For an analysis of adult education programs in Massachusetts, see:
Martin, Anita L., Public School Adult Education in Massachusetts, Adult Education Association in Massachusetts, Inc., 1970.

BEST COPY AVAILABLE

B. Participation of Adults in Part-time Educational Activities

Evidence of Educational Activities IV-13
    Table: Characteristics of Male Participants in Educational Activities IV-14
    Table: Characteristics of Female Participants in Educational Activities IV-15
Characteristics of Part-time and Continuing Education Students in Colleges and Universities in Massachusetts and Other States. IV-16
Characteristics of Adult Students in Other Educational Activities in Massachusetts IV-18
Interests of Adults in Educational Activities. IV-19
Apparent Barriers to Learning. IV-21
Demand for Various Educational Formats and Credit. IV-21
Met and Unmet Needs. .IV-23
Participation of Women in Adult Education. IV-24
    Social Forces Encouraging Women to Pursue Continuing Education. IV-25
    Interests and Needs of Women in Adult Education IV-26
    Women in the Labor Force. IV-28
    Women in Continuing Education IV-28

PARTICIPATION OF ADULTS IN PART-TIME EDUCATIONAL ACTIVITIES

Who is the typical adult student in each type of educational activity or institution and how well are the needs of the population being met? In general, those engaged in adult and continuing education activities are younger, better-educated, and at higher income levels than average. In national surveys needs and interests may be expressed by less-educated, lower income groups, but a variety of personal and institutional factors appear to inhibit their participation.

In general, part-time and continuing education students in colleges and universities are an elite group in adult education. In 1969, about 25% of all adults in formal education activities were enrolled in part-time college programs. Compared to the typical adult student, they are younger, more job motivated, and of higher educational background and occupational status.[1]

Students in job training from business and industry or government programs and students in correspondence schools are of lower educational and occupational status. They are more likely to be male than female. Adult education participants in noncredit activities of public or private schools are less job-motivated, older, and also high income. They are more likely to be female than male.

The adults who express an interest in learning activities but do not participate are generally those of the lower and lower-middle class ends of the education, income, and occupational status scales. Their interests are largely vocational rather than leisure-oriented, and they perceive cost and time barriers to attendance. The greatest gap in interest and participation exists with respect to the vocational interests of women.

Evidence of Educational Activities

The most comprehensive survey of adults taking courses was part of a 1969 Current Population Survey.[2] Seven types of educational activities were identified along with participation rates: classes in public or private school, (28%), college part-time (25%), job training courses (27%), correspondence courses, (8%), classes in the community (13%), private instruction (6%), and other educational activities (10%).

Across all categories participants were younger than the general population (18.2% participation rate for under 35 population, 7.7% for over 35), white (11.2% participation rate compared to 8.4% for Blacks), male (12.6% vs. 9.6% for females), better educated (85% had finished high school vs. 54 and 51% for females and males in the general population), of higher family income and higher occupational status (40% of males in professional or managerial jobs vs. 22% in the general male population).

BEST COPY AVAILABLE

CHARACTERISTICS OF MALE PARTICIPANTS IN EDUCATIONAL ACTIVITIES
(Source: 1969, National Center for Educational Statistics)

A. SEVEN TYPES OF EDUCATIONAL ACTIVITY	CLASSES IN PUBLIC OR PRIV. SCH.	ATTENDING COLLEGE PART-TIME	JOB TRAINING COURSES	CORRES. COURSES	CLASSES IN COMMUNITY	PRIVATE INSTRUCTION	EDUCATIONAL ACTIVITIES
Total Reported Percentages:	23%	27%	37%	11%	8%	4%	10%
1. Age							
under 25	18%	21%	19%	20%	6%	14%	15%
25-34	36%	46%	39%	45%	30%	30%	31%
35-44	25%	20%	23%	20%	34%	28%	25%
over 45	22%	12%	19%	15%	31%	27%	29%
2. Race							
White	93%	95%	94%	96%	95%	94%	94%
Black	6%	5%	6%	3%	5%	4%	5%
Spanish-Speaking	1%	1%	1%	0%	1%	2%	1%
3. Schooling Completed							
less than 12 years	19%	1%	14%	20%	18%	12%	14%
12 years	34%	22%	46%	48%	30%	32%	38%
1-3 years college	18%	30%	19%	21%	15%	32%	28%
4 years college	14%	20%	14%	7%	21%	16%	17%
5 or more years college	14%	26%	8%	4%	15%	18%	25%
4. Employment Status							
working	95%	98%	97%	96%	96%	93%	94%
looking for work	1%	1%	1%	2%	1%	2%	2%
not working	3%	1%	1%	2%	3%	4%	9%
5. Occupation							
Professional/technical	22%	44%	18%	14%	22%	27%	32%
Managerial/administrative	14%	11%	16%	14%	22%	23%	15%
Clerical	7%	8%	6%	8%	4%	10%	4%
Sales	7%	4%	8%	8%	7%	5%	6%
Craftsman	18%	9%	24%	25%	17%	12%	14%
Operative	12%	7%	11%	16%	9%	10%	11%
Laborer	5%	1%	2%	4%	2%	1%	2%
Service Worker	6%	6%	10%	5%	7%	2%	6%
6. Family Income							
less than $5,000	10%	5%	8%	9%	15%	11%	6%
$5,000 - $6,999	11%	10%	10%	13%	8%	12%	12%
$7,000 - $7,999	6%	9%	7%	9%	6%	2%	4%
$8,000 - $9,999	15%	18%	20%	21%	16%	15%	17%
$10,000 - $14,999	33%	34%	33%	31%	35%	35%	39%
$15,000 - $24,999	20%	21%	19%	15%	17%	13%	27%
$25,000 and over	4%	4%	4%	2%	4%	13%	6%

BEST COPY AVAILABLE

CHARACTERISTICS OF FEMALE PARTICIPANTS IN EDUCATIONAL ACTIVITIES
(Source: 1969, National Center for Educational Statistics)

SEVEN TYPES OF EDUCATIONAL ACTIVITY	CLASSES IN PUBLIC OR PRIV. SCH.	ATTENDING COLLEGE PART-TIME	JOB TRAINING COURSES	CORRES. COURSES	CLASSES IN COMMUNITY	PRIVATE INSTRUCTION	EDUCATIONAL ACTIVITIES
Total Reported Percentages:	33%	24%	17%	5%	19%	8%	10%
1. Age							
under 25	22%	28%	24%	31%	10%	15%	26%
25-34	30%	31%	26%	30%	28%	26%	24%
35-44	21%	21%	2[illegible]%	14%	26%	29%	21%
over 45	26%	21%	27%	25%	35%	30%	29%
2. Race							
White	87%	90%	85%	89%	92%	94%	89%
Black	11%	9%	14%	10%	7%	4%	9%
Spanish-Speaking	2%	1%	1%	0%	1%	2%	1%
3. Schooling Completed							
less than 12 years	20%	2%	16%	25%	19%	13%	15%
12 years	47%	23%	48%	48%	44%	40%	42%
1-3 years college	16%	27%	16%	15%	19%	25%	17%
4 years college	12%	29%	13%	7%	13%	16%	18%
5 or more years college	6%	19%	6%	4%	6%	7%	7%
4. Employment Status							
working	54%	75%	83%	61%	39%	43%	57%
looking for work	3%	2%	3%	5%	2%	2%	2%
not working	43%	23%	14%	34%	59%	55%	41%
5. Occupation							
Never Worked	43%	23%	15%	33%	60%	55%	41%
Professional/technical	15%	45%	28%	12%	12%	16%	23%
Managerial/administrative	1%	1%	5%	4%	1%	2%	2%
Clerical	23%	22%	28%	27%	13%	17%	21%
Sales	3%	2%	5%	6%	2%	2%	1%
Craftsman	1%	0%	1%	0%	0%	0%	0%
Operative	6%	2%	4%	6%	3%	3%	3%
Laborer	0%	0%	0%	1%	0%	0%	0%
Service Worker	8%	5%	14%	9%	6%	4%	8%
6. Family Income							
less than $5,000	17%	12%	18%	26%	13%	11%	9%
$5,000 - $6,999	9%	14%	11%	12%	10%	10%	12%
$7,000 - $7,999	7%	6%	8%	11%	6%	6%	5%
$8,000 - $9,999	12%	11%	12%	17%	16%	17%	18%
$10,000 - $14,999	32%	29%	27%	26%	34%	26%	26%
$15,000 - $24,999	18%	23%	19%	7%	14%	20%	26%
$25,000 and over	5%	4%	5%	2%	7%	9%	4%

Participation also varied significantly among types of educational activities according to these same demographic variables. Women were more likely to be involved in classes in public or private schools, classes in the community and private instruction, while men were likely to be involved in job training and correspondence courses. Older students were more likely to be in public or private school classes, classes in the community and private instruction; younger students in college part-time, job training, or correspondence courses. Educational background and occupational status was highest in college part-time and lowest in correspondence courses. Participation among educational activities did not vary as much by family income as with other status variables.

The most recent evidence (1973) of adult participation in part-time educational activities is the nationwide survey conducted by the Educational Testing Service for the Gould Commission on Non-Traditional Study.[3] The definition of educational activity is "having received instruction in a subject or skill". Only 50% of those people considered "adult learners" were in formal classes or activities comparable to those considered educational activity in the Current Population Survey. Other informal home, employer, and community activities were considered education in the ETS sample.

The general profile of the adult learner can be drawn, however, as equally likely to be male (49%) or female (51%): slightly younger than the population (28% over 45 vs. 35 in the general population; single (18% vs. 12% in the general population); better educated (83% finished high school vs. 67% in the general population); and of higher occupational level (23% professional or managerial vs. 15% in the population.)

Adult learners cannot be divided among types of activities, however, for two reasons. First, the ETS sample of adult learners is small (1207) compared to the Current Population sample (about 13,000). Second educational activities in the ETS sample are broken down into categories which do not clearly aggregate into any single category of college part-time or any other categories comparable to the CPS data.

Other studies of adults involved in educational activities describe many of the same characteristics of students. These will be discussed below for 1) students in part-time or continuing education programs in colleges and universities and 2) students in other forms of adult education.

Characteristics of Part-Time and Continuing Education Students in Colleges and Universities in Massachusetts and Other States

Comparison of part-time and continuing education college students identified in the 1969 Current Population Survey and in surveys in several other states with students in Massachusetts reveals that programs in the Commonwealth are catering to a slightly younger, male, job-oriented group. In Massachusetts a high percentage of students are male--about two-thirds. Across the nation in 1969, 55% of part-time college students were male; in Oregon credit continuing education 45% were male, in Illinois part-time undergraduate study 58% were male.[4]

In Massachusetts a lower percentage of students were 45 or older--9%. Nationwide in 1969 those over 45 were about 16% of part-time and continuing education students; in Oregon, 22%; in the Vermont community college system, 15%; in Colorado extension, 15%.[5]

About the same percentage of students currently enrolled had a previous educational level of 12 years or less; in Massachusetts about 20%, across the nation 24%, in Oregon 18%. Students in the Vermont Regional Community College Commission are an exception with 62% having a high school diploma or less.

In terms of occupation, 60% of Massachusetts part-time and continuing education students who work are in the high status professional, technical and managerial/administrative occupations. Across the nation 51% are from these occupations. Thus Massachusetts students are of somewhat higher occupational status levels.

Income levels for specific jobs vary across the country and over time. Thus comparisons with other states are less valid than the above. In Massachusetts 58% of continuing education students not living with their parents are in families with incomes over $10,000. Across the country in 1969, the figure for part-time students is 48%; in Oregon 53%; in Illinois (including students who still live at home) 30%. In Vermont only 32% have family incomes over $9,000.

Part-time and continuing education students across the country seem to be highly job-motivated. In Massachusetts, 83% of men students and 70% of women students indicated their primary motivation for enrolling in continuing education was to improve or advance in job, or to get a new job. In 1969 nationwide, 86% of sampled students in all adult education responded that one of their motivations was to improve or advance in jobs, while 12% responded also to get a new job. In Massachusetts 10% of men and 17% of women responded that their primary reason for enrolling was for personal, family, social or recreational interests. In Oregon 20% respond for personal reasons, in Vermont 40%, in Colorado 8%. The responses to these questions are not strictly comparable, because in the nationwide survey, respondents could indicate more than one reason, while in Massachusetts only the primary reason was indicated. In other surveys the reason "to get a degree" was listed separately while in Massachusetts this reason was subsumed under "for general information" and job-related reasons.

In comparison to the population distribution across the country, the Northeast States as a whole have typical enrollments in part-time college (25% of male students in college part-time are in the Northeast v. 25% of the total sampled male population). The Western states have the highest participation rates in college part-time (28% of the male students vs. 17% of the total sampled male population). The South has the lowest participation rates in part-time college and North Central States are slightly less than average. Similar figures exist for female participation rates.[6]

Characteristics of Adult Students in Other Educational Activities in Massachusetts

Three other studies present some evidence on the characteristics of adults in noncredit adult education within Massachusetts. The first is the 1968 report by Anita Martin, Public School Adult Education in Massachusetts.[7]

Analysis of adults enrolled in 28 public school adult education programs indicated that students were "better educated, younger, and with higher status jobs than the adult population as a whole." Compared to the continuing education student clientele in 1973, adult education students were older (24% of male students and 31% of female students were over 40 vs. 7% of male and 11% of female Continuing Education students (see Section III.A.1) 45 or over); and less educated than continuing education students (the data may be biased by the small number of public schools included in the Martin sample).

The second sample is from the Concord-Carlisle Adult and Continuing Education program (1971) with classes in crafts, business skills, human relations, arts, languages, and physical education.[8] A large proportion of the students were female (87%), and 85% of all students were housewives. Students were older than continuing education students (41% 40 or over vs. 9% 45 or over). In terms of educational background, they were less concentrated in the college years than the continuing education students. A higher percentage had a bachelor's degree or more (43% vs. 40% of continuing education students).

The third sample is from the Boston Center for Adult Education (1966).[9] In this sample as well, students are likely to be female (two-thirds of all students vs. 34% of continuing education students). About half are over 35 (vs. 22% of male and 27% of female continuing education students) and two-thirds are single (vs. 33% of male and 46% of female continuing education students). Students are from high status occupational areas (40% professional/managerial and 40% clerical/sales), but still lower than continuing education students.

In this sample students were asked about their reasons for enrolling in courses. In contrast to the high job motivation of continuing education students, adult evening students responded "to spend their time pleasantly and enjoyably," "to improve their general knowledge and skills," and to "meet new and interesting people." Almost none responded "to improve his income, his performance on a job, or his chances of obtaining another job."

Although there have been surveys of students in proprietary institutions, none have focused specifically on the part-time or evening student. Many administrators of proprietary schools responded to the questionnaire sent them with comments about their evening clientele as middle aged, many housewives, lower middle class or middle class. See Section II.K.

Interests of Adults in Educational Activities

A variety of surveys have been conducted across the nation to determine the interest as opposed to the participation of adults in educational activities. The most comprehensive is the Educational Testing Service survey mentioned previously. 74% of males and 80% of females indicated that there was something they would "like to know more about, or would like to learn how to do better." These people were classified as "would-be learners."

Although interest in learning declines with age, particularly over 55 (87% interest response for 18-24 and 58% for 55-60), the would-be learners are nevertheless older on average than the learners (31% 45 or over vs. 28% 45 or over). Single people are more interested in education and are also more likely to be enrolled currently. Interest in learning rises with educational background and occupational status (77% interest for high school graduates, 91% for college graduates; 74% interest for skilled workers, 91% for professional/large business workers).

But people of lower education and occupational status are less-represented in the learners group than their interest would indicate. Those with less than high school diplomas comprise 28% of those interested in learning, but only 17% of those learning currently in any of the educational activities considered. Unskilled/semi-skilled workers comprise 22% of those interested in learning, but 16% of those actually learning.

Because both would-be learners and learners are considered in the ETS study it is possible to analyze what needs, as expressed in the survey, are being met by the current system and what needs are not. It should be noted that many more interests are expressed than are actually met by current activities. This may be both because people are not that serious about their interests or because there are barriers of one sort or another to their participation. Whatever the reasons, some interests appear to be relatively better met than others. In general the hobbies and recreation and general education interests are better met than average and while the vocational interests are poorly met.

The following table reflects the discrepancies in interests and participation in greater detail.[10] The first column has the percentage of people indicating an interest in each subject; the second

(1) Interest by Subject		(2) First Choice	(3) Actual Study
vocational	78%	43%	35%
general education	48	13	25
hobbies and recreation	63	13	42
home and family	56	12	13
personal development	54	7	11
public affairs	36	5	6
other		8	

column the first choice of interest across the fields; the third column the percentage of people actually participating in each field. Columns (1) and (3) do not sum to 100% because people may study in more than one subject area.

It is clear that hobbies and recreation interests are well-served: 63% express an interest, and 42% participate in such an activity. Only 12% indicate it as their first choice. General education is also relatively well-served: 48% express an interest while 25% actually participate. The greatest discrepancy between interest and actual learning is in the vocational fields: 78% express an interest while 35% actually participate. Vocational subjects are also more than three times as popular as the second field of first-choice interest, general education (43% vs. 13%).

Because vocational interests are so poorly met by educational activities, it is useful to examine which specific groups are least satisfied by current programs. First, males are more likely to have their vocational interests met than females: 46% of males indicate their first-choice topic as vocational and 46% participate in vocational activity. In sharp contrast, 40% of females indicate a first-choice vocational activity, but only 24% actually participate in a vocational activity.

Other specific groups are also relatively underserved. Interest in vocational subjects is highest among those with 9-11 and 12 years of school and lowest among those with a college degree or higher. Yet participation in vocational educational subjects is highest among those with some postsecondary and college graduation or more and lowest among those with 9-11 years of schooling. Similarly, interest in vocational subjects is greatest among skilled workers and sales/clerical workers, while participation is highest among small business and skilled workers.

It appears that the vocational interests of only certain groups are met by the system. The two vocational topics most commonly studied are technical and managerial skills, those in which educated, professionally-oriented males express an interest. The types of vocational subjects in which the underserved groups express an interest are not extensively studied. Women are interested primarily in business skills, nursing, cosmetology and medical technology. Less-educated groups and lower occupational status groups are interested in business and technical skills and industrial trades.

General education (in the ETS study defined to include humanities, social and physical sciences as well as basic education) interests are relatively well-served in the population. Again, however, certain groups are better represented than others. Greatest interest in general education is expressed by: 55-60 year-old people, Blacks (especially females), those with 1-8 years of schooling and college graduates. Those participating at higher rates for their population group are 25-29 year-old people (55-60 year-old people have the lowest participation rate in general education), Blacks, and those with some postsecondary education or college graduates.

BEST COPY AVAILABLE

Hobby and recreation interests are relatively well-served for all groups expressing an interest. However, it is interesting to note that Blacks, especially female, are neither interested in hobbies nor participate in such activities to any great extent. Older people (55-60) express the greatest first-choice interest in hobbies and recreation and they are also participating at a high rate. Males and females express comparable interest in hobbies, but females participate to a greater extent than males.

Apparent Barriers to Learning

Respondents in the ETS survey were also questioned as to the reasons "keeping them from learning what they want to learn." For the total sample, cost (53%), not enough time (46%), don't want to go to school full-time (35%), home responsibilities (32%), job responsibilities (28%), and amount of time required to complete program (21%) are the most important reasons.

The groups underserved currently by programs perceive a different set of barriers, however. Women perceive cost as the greatest barrier while men perceive not enough time. Women clearly have time for the program but find family responsibilities and no child care as other obstacles. The less educated groups perceive cost, no information, low grades, too much red tape, and no transportation as more significant barriers than other groups. They find time to be less of a problem than the average.

Demand for Various Educational Formats and Credit

Responses were also solicited in the ETS survey for desired methods for learning, locations, times, and interest in credit. The greatest interest in learning methods is expressed for lectures or classes (28%); on-the-job training or internships (21%) and conferences and workshops (13%). Very low interest is expressed in the nontraditional forms of TV or radio courses. Interest in these methods does not vary significantly for the subgroups identified as underserved.

The preferred location for learning is primarily the school system (45%). By contrast, only 26% of the learners are currently studying in the school system. Most students would also like to participate one or two evenings a week (49%). Would-be learners not being served are interested in traditional learning formats.

Respondents were also asked about their desire for formal certification or degrees over the next ten years. 39% indicate no interest in formal recognition; 22% would like a certificate or license; 16% a high school diploma; 9% an AA degree; 12% a BA; 8% an MA; and 4% a Ph.D.

Greatest interest in credit was for vocational subjects and least for hobbies and recreation. Interest is greatest among those under 25 (29%) and least among those over 55 (15%). Lower occupational status groups are interested in skill certification and high occupational status groups in academic credit.

A second general study of adult educational needs has been made by the Corporation for Public Broadcasting to identify a potential audience for an Adult Learning Program Service . CPB found a group of adults age 25 to 44 who have not completed high school, "middle Americans" in blue collar jobs dissatisfied with their educational background. They would be interested in practical, not intellectual study, and learning by doing if they perceive financial returns. Among Blacks, the level of aspiration is higher than among Whites.

A third survey was conducted in Colorado of adults and their education needs.[11] 25-30% of the group surveyed has less education than a high school diploma. Vocational interests of males were greatest in areas of trade and industry, business, and agriculture; of females health services, clerical secretarial and business. Interests at the postsecondary level were for males in business, agriculture and computer science; for females in health sciences, child development, and business. When questioned as to what reasons prevented their taking advantage of current educational programs, people responded: working, haven't time (38%) and no desire or need (32%). Cost was a minimal factor (2%).

A fourth survey of interest in an open admission "school without walls" was conducted in Wisconsin. 73% of the respondents indicated they have wanted further education since stopping school. 33% said they might enroll in courses. Of these, only 32% were interested in college credit, compared to 48% for diploma courses, 10% for high school credit, and 8% for vocational technical credit.

A survey of demand for an external degree program was conducted in several counties in California.[12] The survey results were limited to those people who would be willing and able to pay $105 @ course and who had 60 college credits already. Of this select group, the median age was 32, median income was $13,000, 73% were males and their interests were greatest in vocational topics: administration, accounting, and computer science, in particular. These potential students were interested in college and community classroom settings during the week. They were interested in television classes, but not when they would have to meet periodically with the instructor. There was some interest in weekend classes.

A survey to determine the potential market for an open university program was recently conducted in Massachusetts for the State College System called The Market for Continuing Education in Massachusetts.[13] Although, as discussed in Section IV.F, the sample is somewhat biased by the fact that it was a telephone survey, the results are consistent with those of other studies. Greatest interest was expressed by young professional or managerial, affluent men and women who already have some college education. Their interest was primarily job-oriented and conventional classroom settings had more appeal than correspondence, TV, or radio courses. Interest was high in credits for past career achievements.

These results are consistent with those discussed in Section

III.A.4 of the survey conducted of 6,000 students currently enrolled in continuing education in Massachusetts. Greatest interest was expressed by students currently enrolled for credit for experience and more counseling services, less for new forms of correspondence or radio programs.

NB: In Section IV.F below the general procedures and pitfalls in estimating market demand for nontraditional learning and "open universities" are discussed at length.

Met and Unmet Needs

To some extent interests expressed by various types of people explain their current participation rates in adult education as a whole and within specific education activities. Younger people are more interested in learning, and they also participate to a greater extent. Older students are found more in public and private schools, community classes and private instruction than they are in college part-time courses. However, other participation rates are not explained by variations in interests expressed. Women express equal interest to men in credit and yet they are currently receiving fewer credits. Their interest in vocational subjects is particularly unfulfilled.

In addition, the allocation of better-educated, higher occupational status persons to college part-time and less-educated, lower occupational status persons to job training and correspondence courses is clear but not necessarily logical. Less-educated and low occupational status groups are interested in credit and in vocational subjects in particular, and there is no *a priori* reason why their interest cannot be met within the college part-time setting.

Participation of Women in Continuing and Adult Education

Women have traditionally participated to approximately the same extent as men in adult education: the 1973 Educational Testing Service Study of learning experiences of adults found that 51% of participants were women, while 49% were men.[1] The 1969 Current Population Survey, on the other hand, showed 48% of participants in formal adult education courses were women, 52% were men.[2]

However, women have traditionally had high participation rates in avocational courses while men have had high rates in vocational courses. In 1969 the distribution of attendance in various types of institutions for men and women was as follows:[3]

	Men	Women
Adult education in public or private school systems	23%	33%
College or university part-time	27%	23%
Job training courses	37%	17%
Correspondence courses	11%	5%
Classes in community	8%	19%
Private instruction	4%	8%
Other	10%	10%

The adult education courses in schools, classes in the community, and private instruction, all heavily attended by women, are likely to be leisure or crafts-oriented. The college part-time, job training, and correspondence courses attended by men are job-oriented.

Further evidence of this concentration of women in avocational courses is provided in the responses to the student questionnaire of continuing education students and in the response to the survey of adult education programs in Massachusetts. In continuing education women are more likely to be in regular academic subjects and special or community service subjects, men in business and professional subjects:[4]

	Men	Women
Regular academic	25%	42%
Trade and industrial	3%	1%
Technical	10%	4%
Business	23%	12%
Professional	27%	8%
Social or community service	10%	28%
Arts and crafts	--	2%

BEST COPY AVAILABLE

	Men	Women
Family and personal skills	--	2%
Cultural or personal interest	1%	3%

Women also have traditionally dominated adult education programs. Two-thirds of the respondents in the survey of the Boston Center for Adult Education students in 1966 were women,[5] and 87% of the students in the survey of the Concord-Carlisle Adult and Continuing Education program in 1971 were women.[6] Most other adult education programs in the state responding to the survey of adult education (See Section I.K) noted that their clientele was largely female. Examples of their descriptions are: "mostly female," "middle aged housewives," "60% female," "70% female, middle age," "90% female, housewives."[7]

Women in avocational courses in community centers or adult education are likely to be older than women in credit courses in college part-time. In public schools 50% of women are 35 and over, in community courses 62%, in private instruction 61%, while in college part-time 42% are 35 or over.[8]

Women have also been less likely to take courses for credit than men. In 1973 44% of male learners sampled by ETS, and 34% of female learners were receiving credit for their activities.[9] In Massachusetts 18% of sampled males and 14% of females had been recently in credit courses of adult education while 11% of males and 19% of females are currently in noncredit courses.[10]

Social Forces Encouraging Women to Pursue Continuing Education

Several converging social trends are leading to women expanding their interests and activities outside the home:

First, women are having fewer children. The birth rate has been declining in Massachusetts for the past 15 years due to liberalized abortion laws and widespread use of contraceptives. In 1960 the U.S. birth rate was 23.7 per thousand women; in 1972 15.0 or 2.28 per woman over her lifetime.[11] This means that the last child is now born at an average age of 30 and this child would begin school at a woman's average age of 35. With homemaking now easier, it is no longer necessary for a woman to remain at home all day to keep the house in order. The average woman then has 30 employable years beyond the time her last child enters school.[12]

Second, more women are staying single into their late twenties and early thirties, and as divorce rates increase there are many more single women with children. These independent women have the time or are forced by circumstance to pursue a career. It is estimated that 42% of working women are either single or supporting a family on their own.[13]

Third, as the society becomes more affluent, families can afford

BEST COPY AVAILABLE

to send women back to school. As housework is made easier by labor-saving conveniences, women have more leisure time to go back to school and a job.

Fourth, the women's liberation movement has encouraged women to question the traditional roles in society and to consider whether they might want additional or different activities in their lives.

Fifth, colleges and universities are being encouraged to respond to women's needs. In some cases scholarship funds are provided and lower fees charged to encourage women to return to school.[14] The Project on the Status and Education of Women of the Association of American Colleges and the Women's Bureau of the U.S. Department of Labor are but two of the national organizations pushing for equal educational opportunities for women.[15] A bill currently before the House of Representatives, "Women's Educational Equity Act of 1973" would encourage and provide support for specific new programs for women.[16]

All of these factors have led women across the country back to school. It was estimated that in 1972 there were close to 500,000 women over 30 on campus full or part-time, double the number ten years before.[17]

Interests and Needs of Women in Adult Education

Traditional interests of women in leisure and home crafts or personal development courses will continue into the future. Home economics courses may even attract more students if food, clothing, and other living costs continue to rise rapidly. Women will want to learn skills to economize on home expenses.

General education interests are also likely to remain high and are being encouraged by programs such as Sarah Lawrence's for women returning to academic studies or Radcliffe's for women to carry on independent research. (See Section V.D.)

However, the greatest increase in demand for courses is likely to be in vocational areas. In a society where status is so much determined by occupation or income, it is important that women who want roles outside of the home find good jobs. If trends of the 1960's continue, female participation rates in the labor force will not increase beyond 45% or 46% by 1980 (from 37% in 1960).[18] However, women who are now or who in the future enter the labor market will pressure for better jobs. Labor force participation rates are also higher among educated women and the more women who return to school, the more who will also return to work.[19]

The ETS survey (See Section IV.B) in 1973 uncovered much greater interest among women for vocational learning than was actually being met by participation in programs. Interest rates as compared to participation rates are shown below as a percentage of would-be learners or actual learners, respectively.[20]

BEST COPY AVAILABLE

	Interests	Participation
Vocational		
Men	46%	46%
Women	40%	24%
housewives	36%	7%
non-housewives	42%	34%
Hobbies		
Men	13%	36%
Women	14%	48%
housewives	15%	55%
non-housewives	14%	44%
General Education		
Men	12%	27%
Women	13%	24%
housewives	9%	12%
non-housewives	15%	31%
Home and Family		
Men	5%	9%
Women	18%	17%
housewives	25%	22%
non-housewives	14%	14%

While the interests of women are being fulfilled in hobbies, general education, and home and family subjects, they are not being satisfied in vocational subjects. Non-housewives are more interested than housewives in vocational courses, but neither groups participates to the extent men do.

The interests of women are still in the traditional women's skills: business, nursing, cosmetology, and medical technology.[21]

Interest in Vocational Topics

	Men	Women
Business skills	3%	14%
Technical skills	10%	--
Industrial trades	10%	--
Nursing	--	8%
Agriculture	6%	1%
Management skills	5%	2%
Engineering	5%	--
Computer science	4%	1%
Cosmetology	--	4%
Medical technology	--	4%

Many women still think in terms of the traditional occupations for women: teachers, nurses, social workers, librarians, and service workers.[22] Yet the demand for new teachers is down and most of these jobs pay low salaries. It will be clear in time that the best opportunities for large numbers of women are in traditional men's occupations: business, engineering, law, medicine, academics, and technical or industrial jobs. Demand for vocational subjects in these areas will no doubt increase.

Women in the Labor Force

There is clear evidence of discrimination against women in the labor force. Even accounting for differences between women and men in hours worked, education, and experience, women's earnings still average only 80% of men's. Overall women earn only about 60% of what men earn, because they are also concentrated in occupations with low wages.[23] In 1970, women still were 97% of the nurses, 95% of the secretaries and 95% of the telephone operators, while only 9% of the doctors, 5% of the lawyers, and 2% of the engineers.[24]

Certain segments of the labor market are favorable to employment for women as a result of government enforcement of affirmative action programs and a feeling of obligation among employers to hire women. But the greatest advantages of this expanding job market go to professional women, who are already on their way to the top, not to the average secretary, nurse or housewife with no skills.

As part of affirmative action programs, businesses have been looking for women accountants, attorneys, engineers, and managers. Because women have not been trained in these fields traditionally, women to take these jobs are in short supply. Women with such skills, or women currently in school who can still choose these types of fields have good opportunities.[25] There is also a trend to hire well-educated women for part-time professional jobs.[26]

However, such trends in the employment of educated women (with bachelor's or advanced degree) do not necessarily work to the advantage of less-educated women. In fact, less-educated women are less likely to even be in the labor force than educated women. Most of the women outside the labor force have at best a high school diploma. If the participation rate of women with five or more years of college is as high as 69%, then the rate for women with high school or less must be considerably lower than 43%, the average for all women.[27]

Women in Continuing Education

The needs of women will vary according to their level of education and skills, their level of self-confidence, and their goals in life. Continuing education programs should respond in kind:

Group One: For the woman who knows that she wants a career and who is self-confident in her talents, the primary services which continuing education can provide have to do with enhancing her job skills and increasing her awareness of the issues which will arise in returning to work.

Now that businesses and professional organizations are opening jobs to women, there is opportunity for ambitious women to advance. However, they often need additional skills to fill these jobs. Training sessions to develop specific skills should be made available to interested women; for example, the three-day seminar for "Developing Management Skills for Women Managers" held by Advanced Management Research.[28] The kinds of management or skill training provided regularly for men in the course of their careers in business, engineering and research by the firms themselves may have to be provided for women before they will be hired at all.

The other service which continuing education can provide is in the area of facilitating the transition onto the job. The problems which women face in trying to enter professional positions are great. Professional men are uneasy about accepting them into the business, or law practice, or engineering group. "The presence of a woman interferes with the mechanisms by which all-male groups function."[29] The absorption of women into working groups of men is a problem for both men and women which continuing education programs can effect in two ways.

First, continuing education can provide counseling or group sessions for professional women to develop an awareness of how they relate to men on the job and how to play the "rules of the game." It is important for women to relate to men on the job in a professional manner.

Second, continuing education programs can be developed for consciousness-raising among men on the job. It may be that the primary adjustment in these job situations needs to be from men. Several firms in the Boston area have already approached various continuing education directors to develop such group awareness sessions for their staffs of men.

Group Two: A second group of women have not made the decision to commit themselves in any degree to a career or work outside the home, but are considering the possibility. For these women the first service continuing education can provide is individual or group counseling and exposure to some of the options. Some women may subsequently decide they they want to pursue a career or other activities; others may decide they prefer not to. But this decision should be made with a realistic understanding of what such a move would involve. Many women have been out of the job market for years and do not know what going back to work entails. It will bring real benefits of self-actualization if they find jobs they like, and money income. It will also bring costs of time spent developing skills, time invested in lower-level jobs to work their way up by performance standards, and costs of pressure, competition, commitment to a regular schedule, etc.

Some women will need support in a decision to work: perhaps the greatest barrier to women's returning to school or work is psychological.[30] Others will need to have their high expectations matched against the real possibilities in their lives. Many suburban housewives are in this category.

If women decide they do want a career, then they will have to develop skills in areas of the market where jobs are available. Continuing education programs can provide women with information about such opportunities available in the area and the training and experience they will need.

Group Three: A third group of women have fewer options in working. They may be supporting families and their goal would clearly be to advance their job prospects. Women in the Boston Study Group on Continuing Education for Urban Women were in this situation. With many years of experience behind them these women needed the credential of a degree to get better jobs and higher pay. The insights of these urban and minority women about their experiences in entering full-time day programs are available in "The Boston Study on Higher Education for Urban Women." They also published a guide to educational opportunities in metropolitan Boston, "The Urban Women's Guide to Higher Education."[31]

The needs of these urban women are markedly different from those of middle-class women in the suburbs. They generally have less time, fewer options because they must work, and lower financial resources. They also may have had less experience in education in the past and need counseling in writing, taking exams, etc. On the other hand they have certain strengths: experience in the labor force, a greater sense of the reality of their options, a better-developed sense of what they want out of continuing education, and a high verbal capacity.[32] The kinds of programs designed for these women should capitalize on their strengths and minimize their problems of access. Credit for life experience, financial aid, courses in the work place, child care, and job counseling would increase their access to the system.

There may be other types of women with special needs. In general, however, two services are essential to all women: counseling and job and other information. Many women have found that meeting in groups to discuss problems either psychological or practical is supportive and directive; or, individual counseling may be appropriate Either way, a forum for women to develop an awareness of their options is essential.

Secondly, job information should be provided to these women both for making decisions about what they want and for directing them with least cost into fields where good jobs are available. Other information, such as how to find child care services, other cent[illegible] for free job counseling such as the Boston Office of WOW (Wider Opportunities for Women) or "Creative Careers" should be supplied.

FOOTNOTES

1. Unpublished tables provided by the Educational Testing Service. Data from the Current Population Survey of May 1969.

2. Ibid.

3. Carp, A., Peterson, R., and Roelfs, P., "Learning Interests and Experiences of Adult Americans," in Cross, K. Patricia and Associates, eds., Planning Non-Traditional Programs: An Analysis of the Issues (San Francisco: Jossey-Bass, 1974).

4. Oregon State System of Higher Education's Report on Division of Continuing Education, Office of Academic Affairs, June 26, 1972, pp. 33-34.

   English, Robert J., A Report to the Illinois Board of Higher Education and the Illinois State Scholarship Commission on Financial Need of the Part-time Undergraduate Student in Selected Colleges and Universities in Illinois, February, 1973, p. 11.

5. Annual Report Vermont Regional Community College Commission, Inc., (Montpelier, August 21, 1972), pp. 56-67.

   Outreach and Occupational Education in Colorado, A Study Conducted for the Colorado Commission on Higher Education by the Academy for Education Development, September, 1972, pp. 82-87.

6. Unpublished tables provided by the Educational Testing Service. Data from the Current Population Survey of May 1969.

7. Martin, Anita L., Public School Adult Education in Massachusetts (Boston: Adult Education Association in Massachusetts, Inc., 1970).

8. Smith, Sidney B., "Those with Education Want More of It," (Boston: Boston Center for Adult Education (mimeo), 1967.

9. "Statistical Evaluation of Participation--Adult and Continuing Education Classes," Concord-Carlisle Adult and Continuing Education (mimeo), 1972.

10. Carp, op. cit.

11. Outreach and Occupational Education in Colorado, op. cit.

12. Siroky, Frank R., The Need for External Degree Programs in California, Report No. 2, Commission on External Degree Programs, California State University and Colleges, January 31, 1973.

13. Becker Research Corporation, The Market for Continuing Education in Massachusetts, Boston, 1973.

14. Carp, op. cit.

15. Okes, Imogene E. Participation in Adult Education, Initial Report 1969. National Center for Educational Statistics.

16. Ibid., p. 20.

17. See Section III.A.

18. Smith, op. cit.

19. "Statistical Evaluation of Participation--Adult and Continuing Education Classes," op. cit.

20. See Section II.K.

21. Okes, op. cit., p. 23.

22. Carp, op. cit., pp. 41-52.

23. Becker Research Corporation, op. cit., pp. 93, 101.

24. "U.S. Births Below Zero Population Growth Rate in '72," The Boston Globe, Dec. 12, 1972.

25. Span Plan Program for Women, Office of the Dean of Women, Purdue University.

26. "Most Working Women Help Support Families," The Boston Globe, 1972.

27. "Mrs. Suzy Coed: More Older Women Return to College: Most Do Very Well," Wall Street Journal, Sept. 11, 1972.

28. Project on the Status and Education of Women, Association of American Colleges, 1818 R Street, Washington, D.C. 20009, and "Plans doe Widening Women's Educational Opportunities," Women's Bureau, Employment Standards Administration, U.S. Department of Labor, Washington, D.C., 1972.

29. Women's Educational Equity Act of 1973, H.R. 208, Committee on Education and Labor, from office of Congreewoman Patsy T. Mink.

30. "Mrs. Suzy Coed:", op. cit.

31. Al-Samarrie, Ahmad L. and Schrock, Joann L., "Women of Working Age: Status, Attitudes and Prospects," National Planning Association, 1971, p. 5.

32. Ekstrom, Ruth B., "Barriers to Women's Participation in Post-Secondary Education: A Review of the Literature," (Princeton: Educational Testing Service, 1972), p. 8.

33. Carp, op. cit.

34. Ibid., pp. 24-25.

35. "Plans for Widening Women's Educational Opportunities," op. cit., p. 5.

36. Economic Report of the President, The Annual Report of the Council of Economic Advisors, Washington, 1973, p. 106.

37. "Employment: Women's Work," Newsweek, February 12, 1973.

38. "Employment: Room at the Top?" Newsweek, February 12, 1973.

39. "Part-time Professionals: More Well-Educated Women Find Firms Willing to Hire Them for Less than Full-Time Employment," The Wall Street Journal, September 8, 1972.

40. Al-Samarrie, op. cit., p. 5.

41. Advanced Management Research International, Inc., "Developing Management Skills for Women Managers," New York, 1973.

42. Fripp, Bill, "It Doesn't Work," The Boston Globe, February 10, 1973.

43. Smith, Alice, "Educating Women--A Decade of Constructive Subversion," Mt. Holyoke Alumnae Quarterly, Winter 1973, p. 284, and Katz, Israel, "A Guide for the Perplexed," presented at M.I.T. Centennial Convocation, June 2-3, 1973, p. 11.

44. "The Boston Study of Higher Education for Urban Women" and "The Urban Women's Guide to Higher Education," WINNERS, Boston, 1973.

45. Riddell, Janet and Bingham, Sam, "Continuing Education: The Older, Wiser Student," Ms. Magazine, September 1973, p. 54, om.

BEST COPY AVAILABLE

C. Licensing and Other Proposed Incentives for Continuing Education

Licensing. IV-37
Salary Increases for Continuing Education. IV-38

LICENSING AND OTHER PROPOSED INCENTIVES FOR CONTINUING EDUCATION

Licensing

A trend that would suggest future possible expansion of continuing education to meet Massachusetts licensing requirements in various professional groups is indicated in several of the State's professional licensing agencies. A demand for continuing education resources to meet this trend is, however, not to be immediately expected inasmuch as continuing education requirements for licensing or license renewal are in several cases only being formally proposed or are in the "talking" stage.

The State Real Estate Board has submitted legislation requiring a minimum of 25 hours of particular education requirements beyond a high school graduation before becoming eligible to take the State real estate exam. Such legislation has been submitted before but has been defeated due to the fact that many current real estate agents might have to meet the new requirement in order to have their licenses renewed.

Massachusetts is currently one of six states that has no special education requirement for obtaining a real estate license. The 75,000 licensed real estate agents in the State obtain a license simply by taking the exam. According to the Executive Secretary of the Real Estate Board, continuing education programs in the state in the field of real estate are few. Some courses are offered at several community colleges, but most courses are given by private real estate schools, of which there are some 25, that set up programs in YMCA's or motels. Also, the Massachusetts Board of Realtors, a private professional group, has established particular courses for achieving membership.

The Board examines some 9,000 applicants a year, and about 60 percent pass the exam. If the above noted proposed legislation is passed, it would create a need for some 125,000 hours of course credit in the field of real estate. This total would be considerably increased if some or all of the existing 75,000 agents were required to fulfill the new requirements in order to have their licenses renewed.

The Board of Public Accountancy has been considering a continuing education requirement for license renewal, but according to the Board's Executive Secretary, the Board is a long way from finalizing such a requirement. Under consideration is a requirement of 20 hours for every two-year period of licensing. Currently, 10 states have a continuing education requirement for license renewal. In Massachusetts, license renewal is automatic every two years after passing an exam. To qualify for the exam, a college degree and three years of qualifying experience are required. Given 2400 actively practicing certified public accountants in the State, it is clear that a 20 credit hour requirement would generate considerable demand for continuing education programs.

The State Board of Registration of Nursing Home Administrators has enacted specific regulations for licensing which include 15 classroom hours of continuing education annually in order to be relicensed. (By 1975 a two-year college degree will be required for license eligibility, and by 1978 a four-year degree.) With approximately 940 licensed administrators in the State and with about 300 applicants taking the license exam annually, it is again clear that the continuing education requirement for license renewal will create a demand for appropriate programs.

Inquiries at other professional licensing offices did not yield responses indicating continuing education requirements as yet being a factor in licensing. The potential for such requirements was suggested in the field of insurance. To become a full insurance broker, a requirement of 90 hours of special course work or one year of experience in a licensed broker's office is required. Courses are now offered at several community colleges and Northeastern University as well as a number of special insurance schools. Because the insurance field is changing, insurance personnel must continuously study to stay current in the field. With 9500 brokers in the State, the potential demand for continuing education would be considerable.

A recent California study of licensing and continuing education[1] indicated that an average of 63.7 percent of six professional groups surveyed indicated an interest in having academic credit attached to continuing education courses for license renewal. For planning of future continuing education programs in Massachusetts, a similar study might be suggested to obtain a precise assessment of interest by professional groups.

Salary Increases for Continuing Education

Advanced degrees or a series of courses will generally qualify people for better jobs and higher pay. In many cases they will also increase earnings for people staying at their same jobs. Teachers, for example, will receive increased pay if they go on to a Master's degree.

Other explicit salary arrangements are currently being considered as educational incentive schemes. In 1970, a bill was passed in Massachusetts to provide salary increases for policemen who pursued further education. Funding of this program has not yet been passed. Proposals to extend the program to firemen have been turned down, while a similar program for nurses paid by the State was endorsed by the Public Service Committee.[2]

---

[1] "Continuing Education for Licensed Professionals in California" Shepard A. Insel, Robert Hoggard, and Bruce A. Robinson. California State University, San Francisco, 1972.

[2] Rosenbloom, Joseph "Extra-pay Extension for Schooling Barred", The Boston Globe, 1973.

BEST COPY AVAILABLE

D. Continuing Education and the Economy

Education as a Form of Investment for the Individual . . .IV-41
Educated Workers and the Job Market. IV-43
Planning for Continuing Education in Massachusetts IV-47

BEST COPY AVAILABLE

CONTINUING EDUCATION AND THE ECONOMY

Continuing education may contribute to the alleviation of several pressing economic problems in Massachusetts: high rates of unemployment, occupational shortages and surpluses, and job dissatisfaction or lack of mobility for certain groups in the job market. Particularly at the area level, continuing education programs and offerings can be coordinated to provide training for the unskilled or retraining for workers needed in jobs opening as the local econonomy shifts.

Education as a Form of Investment for the Individual

Educational attainment is associated with a number of economic benefits for the individual: the likelihood of higher earnings on the job, access to more interesting and satisfying types of work, and increased chances to be employed rather than unemployed. Education also has costs associated with it: the costs of attending school, and more importantly, the costs of income foregone when the worker spends time away from the job.

In theory, each individual will make a judgment as to the expected economic benefits and costs of his going to school. If benefits are sufficiently greater than costs he will attend. Of course there are other aspects to a decision to obtain further education, such as a personal desire to learn or socialize. However, considered solely in terms of economic benefits, the decision to enroll in school may be seen as an offsetting of benefits and cost. In this respect education is similar to an investment in stocks and is called an investment in "human capital."

An important derivative of this offsetting of benefits and costs is that younger people are more likely to invest in vocational activities than older people. Because the benefits of education are increased earnings for the rest of one's lifetime, total benefits will be higher the younger the individual is. On the other side, costs will be the same or possibly lower for younger are groups because foregone income will be less for younger workers. However, older people will be found in avocational courses where the decision to enroll is not made on economic grounds. Women are also less likely to attend school than men if they perceive the benefits on the job to be lower while the costs are the same.

There are a variety of types of education and special markets for educated labor which the individual must consider when making a specific decision about further education. On the one hand are a number of educational options he may choose from general education to specific vocational and job-related educational programs. Much of full-time undergraduate education in the past has been general in nature; its purpose has not been job-related, but more broadly academic or cultural. Examples are the general studies of humanities, social sciences, and physical sciences majors. Most of graduate and professional education is job-specific in nature--business, engineering, teaching, etc.--leading to a narrow subset of jobs within the economy. The presumed advantage to an education which is general in nature is that it provides a basis for a variety of jobs. The generally educated individual may have greater flexibility in switching jobs during his lifetime, either by personal choice or by necessity when the economy shifts and his skills in one occupation are in less demand. A specifically job-related education also has certain advantages as an investment. Such educational preparation can make an individual more attractive to an employer with specific job openings and possibly make him less easy to replace by others with only general education.

On the other hand is a diverse and changing job market. At any one time certain skills may be in greater or less demand depending on shifts in the economic structure and the general economic condition. Earnings will vary according to how much in demand are specific skills and how great is the existing supply of those skills among workers. There are several current and poignant examples of this variation in supply and demand. As the economy and society have changed over the last several years, teachers, engineers, and other scientists have faced a situation of falling employment opportunities with supply exceeding demand for those particular skills. In contrast business, trade and other fields have been areas of current excess demand over supply. The effects of this changing job market on educational investment will be discussed further below.

The individual will consider the earnings levels associated with each occupation in which he has an interest and must consider whether the market for this particular occupation will be in excess supply or demand in the future. The individual may not correctly perceive trends in the market or he may choose a particular occupation he thinks he will like in spite of trends in demand.

An investment in continuing education, while unique in several respects, is also made according to this general decision process of weighing benefits and costs. It is not surprising that continuing education students are younger than 35 since benefits are greater for the young. It is also not surprising that motivation and interest are so highly job-related (83% for men, 70% for women students). These students, by and large, are adults with other responsibilities than school, and their time is more valuable than that of the 18-21 year old undergraduate. They cannot afford to take extended time off their jobs since foregone earnings are high and they often have families; but they can perceive clear benefits from part-time study. Because they have already worked for some years, continuing education students are more likely than other college students to perceive clearly the benefits of education in the job market. It is interesting that their motivation is largely internalized: in only a small percentage of cases did students state in response to the student questionnaire used in this study that their employers "required" further education.

The concentrations of continuing education students in teacher education courses, business and engineering are explained by job motivation. Teachers receive clear salary advances as benefits and face lower costs than the average student when they receive vouchers for taking on student teachers. People in business courses are often those who at a younger age took programs in technical or scientific fields and now need some formal training to move easily into management positions. Continuing education plays an important role in occupational retraining and updating. Although 48% of students are continuing their education in the same field as their former education, 52% are retraining in new areas of skills. (See Section III.)

Continuing education in post secondary institutions is only one of several forms of part-time education open to adults. Trade and technical courses have been concentrated in proprietary and correspondence institutions. Extensive job-specific training is also carried on within business and industry.

In summary, each continuing education student concerned with advancing in his career has made a judgment that the economic benefit will exceed the costs. This judgment is based on his perceptions of opportunities for employment in the job market.

Educated Workers and the Job Market

Moving from the perspective of the individual to the perspective of the economy as a whole, what is the impact on an economy of higher levels of education among workers? A country such as the United States has a comparative economic advantage in the skills of its people. Not only are educated workers more productive in certain jobs and able to perform more complicated jobs, but a well-educated group of businessmen, engineers and scientists have made productive changes in marketing and distribution mechanisms and instituted technological innovations.

It has been recognized since World War II that in both advanced countries such as the U.S. and in underdeveloped countries, a better-educated labor force is one important means to economic growth. If this is the case, governments are of course interested in how many workers should be educated to what levels and in what fields to maximize this growth, and several techniques have been developed. One of the major methods has been manpower planning. In the pages following, a case will be presented against the use of manpower planning over the long term and in favor of a flexible and responsive system of continuing education, as defined below.

Manpower planning is the name for a system of educational planning used extensively during the 1960's, both in this country and overseas. It is a method of predicting future "needs" of the economy for types of workers by educational field and level. Basically, it involves these steps. First, the average educational background of workers in each occupational category is calculated, and assumed to be "required" of workers to perform in that occupation. Second, the distribution of occupational categories within each industry is calculated, and this distribution is assumed to be required. Third, projections are made of changes over time in the size and share of each industry in the total economy. From this projected picture of the economy and the position of each industry within it, projections are made of the occupational distribution which would be needed to operate the economy. Finally projections are made of the educational levels needed by workers within these occupations required to operate the economy. Given the education of current workers, the level, type, and amount of education needed for new or retrained workers can be calculated.

Although manpower planning seemed to offer a rational method of planning educational systems to maximize growth, serious flaws in the method became painfully obvious over the years as projections failed. First, it is difficult if not impossible to project the industrial mix or state of the economy many years ahead. In underdeveloped countries, such as India, many high-level technicians and professionals were trained to fill jobs in industries which did not grow as hoped. The result was a severe problem of unemployment among the well-educated who were unwilling to take jobs below their training.

In the United States, as well, industrial projections have been discredited by unexpected shifts in the economy. The problem is not poor projections on the part of planners, rather the response of the economy to social forces which cannot be predicted. The Vietnamese War led to inflation and high rates of unemployment; political pressures against defense and space spending led to a severe drop in aerospace industries. Current cuts in social welfare spending are leading to cutbacks in public employment. These economic shifts resulted in employment problems first for engineers and scientists and now for workers in social service agencies.

Second, the occupational mix of industries is not static, but changing over time. As technologies change, occupational needs may change. Individual firms may also alter their occupational mix if they find that wage rates are changing and certain groups are becoming too expensive to use at past employment levels. The effects of these actions will alter the occupational mix across the industry as a whole. In health care, for example, nurses and paramedics are performing some of the functions once carried out by doctors. Doctors have become, relatively, too expensive.

Third, there is rarely a specific level of education which must be attained in order to perform on the job. Within each job or occupation, performance increases with education, and there is no minimum "required" level necessary. In fact, the average educational level within each occupation has been steadily rising.

In general the labor market is a far less predictable system than assumed by the manpower planning theory. There is no certain path for the economy. Although adjustments may take some time, there are a variety of ways that the market can absorb changing educational levels. Hiring standards may rise or fall within specific occupations and wages with them. Firms may reorganize work patterns to utilize a different mix of workers. They may also retrain their own workers into higher level jobs if there is a shortage. Technological change may be directed at techniques which utilize one or another level of education to a greater extent.

In Massachusetts several manpower studies have been made, one of the recent being "Massachusetts Manpower Requirements to 1973."[1] Because of the problems inherent in projecting economic factors and the flexibility of the labor market in absorbing various educational mixes, it is not recommended that studies of these types be used for planning of continuing education in Massachusetts.

If manpower planning is not a reliable technique for planning programs of continuing education, what is the alternative? A continuous coordination of employers and continuing education directors in each geographic area to provide for a flexible and responsive system of meeting local needs is recommended. In particular, continuing education can alleviate the problem of unforeseen shortages and surpluses in specific labor markets by providing occupational retraining and upgrading of skills of adults.

Currently, there is little planning for continuing education. It is assumed that individuals will perceive correctly the benefits and costs of continuing education in various fields and will make appropriate decisions in response to needs of the labor market, but often this is not the case. If governments cannot always correctly predict occupational trends, individuals will not either. Furthermore, there is evidence, particularly among current high school students and housewives thinking of returning to work, of serious misconceptions about the demand in certain occupations and the education needed to be hired for them. Thus a more active coordination of continuing education programs and the labor market would be desirable. Both students and the economy would benefit from some form of coordination: students would become aware of current fields of shortage or surplus and employers would avoid partially the costs of adjustment to either shortage or surplus markets if students were attracted to skills they needed. The goal of such coordination would still be to leave decisions to the individuals, but to structure a situation in which individual decisions will lead to socially and economically optimal conditions.

Because there is no feasible method to project needs accurately on a long-term basis (uncertainty is too great), measures should be taken to maximize the flexibility of the response of continuing education programs to economic needs in the short-term. The quicker the response and the more accurate the response, the lower are the costs of maladjustments in the labor market and the higher the benefits to individuals and the economy.

Planning for Continuing Education in Massachusetts

The primary economic concern in Massachusetts, 1973, is an unemployment rate remaining as high as 7%. This rate reflects an economy which has not sufficiently counteracted the steady post-war loss of jobs in manufacturing, particularly textiles and footwear. Although service industries, government and high technology industries around Route 128 have grown, they have not grown enough to absorb the displaced workers, particularly in textile-oriented areas such as New Bedford, Fall River, Lowell, Lawrence/Haverhill, Springfield, and Brockton. In addition, technical firms in the Rte. 128 complex lost business and laid off many professionals when cutbacks in space and defense spending were made in the late 1960's. The national recession of recent years has hit Massachusetts particularly hard and recovery has been slower here than in other areas of the country.

The solution to unemployment in Massachusetts can only come from the creation of more jobs in these areas. A variety of tax reforms are under consideration to encourage businesses to hire more workers and to encourage out-of-state firms to locate in Massachusetts. But several measures can also be taken to improve the employability of the unemployed or underemployed (in jobs below their capabilities). Many of those who lost jobs in failing industries were older than average and lacked skills needed for new jobs. Many are from minority groups recently moved into Massachusetts. For these groups language barriers, lack of public transportation and day care centers are inhibiting employment. Many are young workers and veterans lacking needed job skills or an understanding of the job market.

Although education and training cannot alleviate unemployment without the creation of jobs, it can improve the employability of these groups lacking needed skills. Continuing education programs could be used in each area to raise or upgrade the skills of unemployed or underemployed groups and moderate the effects of shortages and surpluses in the job market.

The coordination of stimulating the economy to create jobs and educating workers to fill these new slots should occur on an area level, not a statewide level. As stated in the Boston Globe editorial of June 11, 1973, economic problems can best be solved at the local level:

> "Perhaps the largest single danger in developing public economic policy is the failure to distinguish between the individual problem, whether it is the industry or the locality, and the overall problem. Put another way, a rapidly expanding Polaroid, which has put millions of dollars into New Bedford to create new jobs, clearly has a different set of problems from a shoe manufacturer in Lynn, who is wondering whether he would stay in business at all. Gloucester, with more than 10 percent unemployment, has a very different set of requirements from a Boston with 5 percent."

A second set of problems for the economy is the development of shortages and surpluses in the job market. Although unemployment and manpower problems are associated to a greater extent with disadvantaged and unskilled groups, shortages and surpluses develop in markets for highly skilled and professional jobs as well. Continuing education programs could be used to retrain or upgrade skills of workers as necessary. For example, several years ago a major source of new engineers was a pool of technicians without formal degrees whose skills were upgraded. This type of training could be coordinated in continuing education programs which would also be in a position to award credit for such work.

The problem of shortages and surpluses in high level jobs has been particularly acute in the Route 128 technological complex. Programs of retraining might well be coordinated through continuing education divisions experienced in the education of adults rather than in newly-formed training programs as was tried several years ago at M.I.T.

A third problem in the economy is job dissatisfaction among certain types of workers and the need for avenues of job advancement in the labor market. Many national studies and news reports are now being published, such as Work in America,[2] which describe the extent of worker malaise. In the telephone survey conducted by Becker Research Corporation in Massachusetts, 23% of clerical, 15% of sales, 15% of operatives, and 25% of laborers (who have completed their education) say that they are somewhat or very dissatisfied with their present careers.[3]

Opportunities need to be provided to people who, after the normal college age, feel that they are in uninteresting or dead-end jobs. Continuing education by its very definition provides such opportunities; but more could be provided if coordination were made with employers. For example, programs to upgrade skills of secretaries might be offered in conjunction with efforts of firms to bring more women into middle management positions.

FOOTNOTES

1. Massachusetts Manpower Requirements to 1975, Occupational Research Department, Division of Employment Security, Boston, Mass., October, 1971.

2. Work in America, Report to the Special Task Force to the Secretary of Health, Education and Welfare, Prepared under the auspices of the W.E. Upjohn Institute for Employment Research, Washington, D.C., 1973.

3. Becker Research Corporation, The Market for Continuing Education in Massachusetts, Boston, 1973.

BIBLIOGRAPHY

Becker Research Corporation, The Market for Continuing Education in Massachusetts, Boston, 1973.

Becker, Gary S., Human Capital, National Bureau of Economic Research, New York, 1964.

Blaug, Mark, An Introduction to the Economics of Education, Penguin Books, Baltimore, 1970.

Boston College - Evening College, "They Went to College Evenings", Boston, Mass., 1969.

Bowen, Howard R., "Manpower Management and Higher Education", Educational Record, Winter 1973.

Bureau of Labor Statistics, "Occupational Manpower and Training Needs," Bulletin 1701, Washington, D.C. 1971.

Bureau of Labor Statistics, "College Educated Workers, 1968-80: A Study of Supply and Demand", Bulletin 1676, Washington, D.C., 1970.

Carnegie Commission on Higher Education, College Graduates and Jobs: Adjusting to a New Labor Market Situation, McGraw-Hill Book Co., N.Y., April 1973.

Doeringer, Peter B. and Michael J. Piore, Internal Labor Markets and Manpower Analysis, D.C. Heath and Company, Lexington, Mass. 1971.

Keeton, Morris, "Campus Responsibility for the Fit Between Training and Jobs", Journal of Higher Education, March 1972.

Massachusetts Manpower Requirements to 1975, Occupational Research Department, Division of Employment Security, Boston, Mass., October 1971.

National Advisory Council on Adult Education, "Career Education: Career Renewal for Adults Through Education, Washington, D.C., May 1972.

BEST COPY AVAILABLE

E. Factors Influencing Demand for Continuing and Part-time Postsecondary Education in Substate Regions in Massachusetts

Western Region IV-52
Central Region IV-54
Northeast Region IV-57
Southeast Region IV-59
Boston Region. IV-62

FACTORS INFLUENCING DEMAND FOR CONTINUING AND PART-TIME EDUCATION IN SUBSTATE REGIONS OF MASSACHUSETTS

The economy and the education system interact in several important ways, as discussed in Section IV.D. Continuing education, in particular, can play an important role in the economy of retraining or upgrading the skills of adults. Because of this linking between jobs and the education of workers, it is important when planning for continuing education to consider the state of the economy.

Demand for continuing education will also vary according to age, income, race and other demographic characteristics. To the extent that the population varies across the State according to these characteristics, programs should differ to meet the particular needs of the specific area.

In this section profiles of the major areas of the State are provided in demographic, socio-economic and occupational/industrial terms. Its purpose is to describe the context within which the institutions covered will provide continuing and part-time postsecon-day educational services. Such a description is a useful background for consideration of needs for continuing and part-time education, although it does not offer a rigorous assessment of demand for services. Attempts to measure and project "demand" would not be fruitful.

Information on economic factors has been drawn from a variety of sources. The information presented does not represent exhaustive data for each region.

WESTERN REGION

The Western Region encompasses all of Berkshire and Hampshire Counties. Though easily thought of as a quiet rural area this Region actually includes the second largest manufacturing center in the State -- Springfield. In fact, the Region is best characterized by its contrasts between urban industrial growth and rural decline. While the two major population and economic centers of Pittsfield and Springfield account for 610,000 of the region's 754,000 inhabitants, there are significant numbers of rural backwashes. Towns such as Hancock, Savoy, Mt. Washington and Middlefield, for example, have high concentrations of non-family adults with very low incomes, the rural elderly whose children have moved to the cities.

The differences between the two principal urban centers are also great. Springfield, with its metropolitan population of 530,000, is a typical urban center, heavily and diversely industrialized and plagued by high unemployment and high minority population concentrations.

Springield is the State's second largest manufacturing center but ranks tenth in the State in single-industry dependence. Though the non-manufacturing sector has grown every year since 1962, Springfield is more dependent proportionately on the manufacturing sector as a whole than is the nation or the State. Accordingly, after steady expansion of employment during the 1960's, Springfield experienced heavy losses in the manufacturing sector when the employement picture declined. In 1971 the unemployment rate peaked at 8.5%, as compared to a statewide figure at that time of 7% and a national high of 6.0%. The employment picture was partly due to the fact that over the decade the area's labor force was growing faster than the population, attracting increasing numbers of women and minority group members.

Pittsfield, with a metropolitan area population of 80,000, conforms strongly to the image of a one-industry rural town. Accordingly, four industries - electrical machinery, ordinance, paper, and non-electrical machinery- accounted for 89% of the manufacturing payroll. Of the 16,000 employed in the manufacturing sector in the Pittsfield area, more than 10,000 are employed in the huge General Electric plant which produces transformers, chemical materials and ordinance systems. This explains why Pittsfield is one of the most highly specialized SMSA's in the State, heavily dependent on a handful of key industries, while it had the smallest manufacturing employment of the State's ten Standard Metropolitan Statistical Areas (SMSA's).

Another major demographic difference between Springfield and the Pittsfield SMSA is in the extent of poverty. Similarly, the Springfield SMSA has a higher percentage of its families living on less than poverty level incomes (6.7%) compared to the Pittsfield SMSA (5.4%). The disparities between the two areas become more apparent when the central cities of the two SMSA's are examined. While the City of Pittsfield has 5.6% of its families living on less than poverty level incomes, the City of Springfield has a 9.6% figure and the City of Chicopee (another large urban area within the Springfield SMSA) has a 10.6% figure. Another index of income disparities between the two SMSA's is median income. The median family income for Pittsfield city is

$10,678, while in Springfield city it is $9,612, in Chicopee city $9,738, and in Holyoke city (the other large urban center in the Springfield SMSA) it is $9,218.

These income differences reflect different education levels in the two areas. In Pittsfield city the median number of years of education (for those 25 years old and over) is 12.2. In Springfield city the median figure is 12.0, in Holyoke 11.6, and in Chicopee 11.2 years.

Of the Region's total Black population of 26,400, over 23,000 are in the Springfield SMSA, and only 1,200 in the Pittsfield SMSA. The Springfield SMSA has the second largest black population in the State, after Boston. From 1969 to 1970 Springfield's nonwhite population increased 68%, which was slightly under the figure for the State as a whole. Over the same period the area's Spanish-speaking population increased from about 1,000 to over 10,000. Like other large urban centers Springfield's minority populations are concentrated in specific areas of the SMSA.

Pittsfield and Springfield diverge on numerous other points, and in general Pittsfield would seem to have fewer and less complicated problems than Springfield. For example, though smallest in manufacturing employment in the State, the Pittsfield SMSA from 1960 to 1967 had a growth rate of 3.1%, second only to the Brockton area. Over the same period Pittsfield has maintained the highest level of per-employee compensation in the State. Springfield, on the other hand, ranks fourth among the State's SMSA's and had a growth rate only slightly higher than the State average despite the large immigration of minority group labor.

In the area around Springfield, the southern tier of the Connecticut River Valley, the overall mix of manufacturing employment is not expected to change over the next decade, though absolute declines in total manufacturing are forecasted. The Pittsfield area has two major industries; manufacturing and tourism. Of these two, tourism can be seen as increasingly important in the years ahead, as the area lies fairly equidistant betwen the Boston and New York areas. As for the manufacturing sector great changes are not foreseen in the short-term; electrical machinery, lumber, ordinance, and miscellaneous manufacuturing will continue to account for about two-thirds of the area's employment, though textiles will continue their decline and chemicals, instruments and metals-transportation equipment are seen making substantial gains.

The third area in this region surrounds the emerging economic center at Greenfield, a city of approximately 18,000. This area, the northern tier of the Connecticut River Valley, is seen undergoing some significant changes during the next decade. From 1960 to 1966 manufacturing employment grew at a rate double that of the New England average, while other employment sectors have undergone increases above New England averages. In the next decade employment manufacturing is seen continuing this rate of growth, though services and finance, real estate and insurance are expected to be the fastest growing divisions in this area.

CENTRAL REGION

The Central Region consists primarily of Worcester County, with a few selected municipalities from contiguous counties. It stretches from the Quabbin Reservoir on the west up to and including Interstate Route 495 on the east. It reaches into some of Boston's southwest suburbs, embracing such towns as Dover, Natick, Wayland, and Framingham. Though large tracts of the Region are forested and dotted with many small lakes and reservoirs that attract vacationers, the Region in fact employs a higher percentage of its labor force in manufacturing (47%) than any other Region in the State. Accordingly, the Central Region has the highest percentage of males in blue collar occupations than any other area of the State and, similarly,the lowest percentage of males in professsional and managerial occupations.

This region has "a relative predominance of lower middle class and working class statuses." Although the region and the two SMSA's within it--Worcester and Fitchburg/Leominster--have roughly the statewide average of women in the labor force (38.4%), there are many outlying towns not included within the SMSA's that have extremely high concentrations of working women. The towns of Blackstone, Webster, and Warren, for example, all have over 45% of their women inhabitants in the labor force. These rates conform to expectations for such traditional industries as textiles which form a sizeable but declining share of employment within the region and the State and to the more recent patterns established by light manufacturing--firms such as electronic components production. Contrasting with this image of a heavily manufacturing-oriented region, however, is the low number of Blacks in the region. In the entire region with a total population of around 257,000 there are slightly more than 6,1000 of which 3,7000 are located in the Worcester SMSA.

Economically,this region breaks down into two areas: a northern one focusing on the Fitchburg/Leominster SMSA and a southern centering on the Worcester SMSA. The salient characteristic of the Worcester subregion is the significant decline of the manufacturing sector there. With over half of its work force in manufacturing, the Worcester SMSA ranks third among the State's ten SMSA's in manufacturing employment. Yet over the 1960's it lost 2.9% of its manufacturing jobs. Over this period textile employment dropped about 12%. Of the key manufacturing industries within the SMSA (machinery; primarily metals, fabricated metals; and stone, clay, and glass) the first two declined over 1960 to 1967, while the last two increased employment. Over this same period of 1960 to 1967, nonmanufacturing industries made significant gains. Most recently, between 1971-72 there were 1,100 more non-manufacturing workers within the Worcester SMSA. But, as in other parts of the State, the gains in nonmanufacturing industries have not completely offset the losses in the manufacturing sector. Consequently, the Worcester SMSA has had rather high unemployment rates; for the past two years the annual average has been steady at 7.2%. In the Worcester SMSA there has been an increase of 41% in the 16-24 age group over the decade 1960-1970. There has also been a substantial increase in minority populations over this same period from a total of 2,800 in 1960 to a total of 9,000 in 1970, of which 5,000 are Spanish speaking.

For the Worcester area an absolute decline of 6% in manufacturing employment is predicted for the period of 1966 to 1980. The one manufacturer seen as making employment gains is electrical machinery, while other types of machinery, textiles, metals-transportation are expected to stay the same or decline. Concurrently, the nonmanufacturing sector is expected to account for an increasing share of the total employment. Indicative of this trend is the construction of the University of Massachusetts Medical School complex in the city of Worcester. The school itself, to be opened in late 1973, will require double its present staff of 120, while the Medical School Hospital, to be completed in 1975 will need some 1,600 people, including nurses, nurse aids, technicians, therapists, dieticians, secretaries and maintenance men.

Fitchburg/Leominster Area

The Fitchburg/Leominster area in the north is another area heavily dependent on manufacuturing employment, with approximately 66% of total employment accounted for by manufacturing. Unlike the Worcester area, however, it appears that the manufacturing sector is holding its own. Although the Fitchburg/Leominster SMSA is eighth in terms of manufacturing employment, it ranks third in manufacturing employment growth over the period 1960 to 1967. The key industries are lumber, furniture, and paper products (the lumber group); chemicals, rubber and miscellaneous plastics; and machinery other than electrical. While the rubber group gained in total employment from 1960 to 1967, the others have declined slightly. Growth has been greatest in those manufacturing sectors that represented only small portions of the manufacturing sector, such as instruments, printing and publishing, and stone, clay and glass. This shift in the area in favor of the smaller but fast-growing manufacturing activities reflects a wider trend in the State as a whole away from traditional and heavy manufacturing disadvantaged by the State's high energy and transportation costs to national markets and toward manufactures that are small, light, easily transported, and dependent upon a highly skilled and technologically oriented labor.

It is expected that by 1980, non-manufacturing sectors in the Fitchburg/Leominster area will have made significant gains. This follows a national trend toward an increasingly service oriented economy, though manufacturing is expected to account for well over half of the total employment. Accordingly, lumber and chemicals will continue to hold their own while significant growth will be in instruments, electrical machinery, and the stone,clay, and glass group.

Of considerable importance to the economic development of this Region as a whole is the role to be played by Interstate 495 running through the towns on the eastern ridge of the Region. Although it has not developed as soon as anticipated, the areas abutting this highway will certainly be major areas of industrial development in the years ahead. The thirty-five cities and towns along the highway have zoned more than 1/3 of their total acreable for industrial use. The 495 area will very likely be developed by electronics firms and as a distribution-warehousing center.

NORTHEAST REGION

The Northeast Region includes all of Essex County and a substantial portion of Middlesex County. It encompasses rather diverse elements ranging from the depressed urban communities of Lowell, Lawrence and Haverhill to the affluent western suburbs such as Lexington, Lincoln, Concord, the less affluent northern suburbs such as Stoneham, Reading, Peabody, and recreational areas such as Ipswich and Newbury.

The Region's two SMSA's are Andover/Lowell and Lynn/Salem which are characterized by some obvious similarieies but some less obvious differences. Both are known as old manufacturing centers, heavily dependent on the shoe (i.e., leather) and textile industries which have been declining steadily since the end of World War II. Both have experienced approximately the same employment shift over the decade from 1960 to 1970; manufacturing employment declined from about 47-49% to about 37% of total employment. Similarly, next to the Fall River area, Lowell and Lawrence/Haverhill experienced the greatest manufacturing employment losses in the State with declines of 8% and 6% respectively over the period 1960-67.

Other points of similarity are in education and income levels of the two SMSA's. Specifically, the Lawrence/Haverhill SMSA has 5.8% of its families living on less than poverty level incomes, while the same figure for the Lowell SMSA is 6.1%. The figures for the central cities involved are comparable: for the city of Lawrence, it is 8.7% and for the city of Lowell, 8.5%, while for the city of Haverhill, it is low at 6.5%. Similarly, median family income for the Lowell SMSA is $10,935 and for the Lawrence/Haverhill SMSA, $10,700. For the central cities involved, the median family incomes are: Haverhill-$9756, Lawrence-$9507, Lowell $9495. And, finally, the two areas have similar educational attainment levels. The median number of years of education(for those 25 years old and over) for both SMSA's is 12.1 years. And for the central cities, the median figure is: Lawrence - 10.4, Haverhill- 11.7, and Lowell- 11.3 years.

Despite these similarities however, Lowell is, in fact, a much smaller manufacturing center than is Lawrence-Haverhill. Lowell, with a manufacturing employment of some 19,000 in 1967, is ranked seventh in the state's SMSA's while Lawrence-Haverhill is ranked fourth among the state's SMSA's with a manufacturing employment of over 40,000. This is in spite of the fact that the two SMSA's have about the same population; Lowell with about 213,000 and Lawrence-Haverhill with about 232,000.

Though the Lowell SMSA is the smaller manufacturing center, it has had the higher unemployment rates, around 12% in 1971 and almost 11% in 1972, compared to a little over 9% for these two years in the Lawrence SMSA. There are additional demographic differences between the areas. While both have negligible minority populations, their growth patterns have been very different. The Lawrence/Haverhill SMSA, the larger manufacturing center, grew about 14% over the last decade and typically, the central cities declined in population while their suburbs increased, substantially in some cases.

The Lowell SMSA, however, grew over that same period 30%, with the central city of Lowell itself registering a slight population increase. Even more significantly, the population of Lowell grew substantially younger over the decade with the 15-19 age group increasing 74 % and the 20-24 age group increasing 72%. In 1960, the under-30 population group comprised 47% of the population of the city of Lowell, while in 1970, this figure was 52%. It appears that this increase was the result of massive immigration of fairly large families from outside the Lowell SMSA.

The other major manufacturing center in the region is the city of Lynn, with a population of about 90,000 and a more significant minority population than Lowell and Lawrence/Haverhill. Specifically, there are about 950 Spanish-speaking residents of Lynn (or slightly over 1%) and 2,400 Black (about 3%) of the city total population). Though the total population of the city has been declining, the number of people under 20 and over 64 has been increasing. For 1970, the median family income was $9,739. Furthermore, 8.4% of Lynn's families have incomes less than poverty level, compared to a figure of 6.1% for the Boston SMSA. The median number of years of education completed (for 25 years old or over) is 12.1.

Lynn is first and foremost a manufacturing city with 60% of its labor force in manufacturing (compared to a statewide average of 42%). One manufacturer dominates: the General Electric plant employs about 16,000 people; accounting for 70% of Lynn's total manufacturing employment and about 42% of its total employment. Moreover, as these figures suggest, GE's dominance is unchallenged; the second largest manufacturing employer is the declining shoe industry which in 1968 employed a mere 3,000 workers, and for which a total of 18 plants closed from 1958-68. In addition, GE's dominance in Lynn has been increasing over the years. In 1964 it accounted for only 52% of Lynn's manufacturing employment, compared to 70% in 1968. The picture is even more unbalanced by the fact that Lynn's third and fourth largest manufacturing employers, a local bakery and shoe factory, have recently gone out of business.

One of Lynn's big problems is lack of land-space to encourage relocation by outside firms and expansion by existing firms. Accordingly, its hope for the future lies in the expansion of the service sector, especially if it is to counteract the dominance of General Electric. New England Telephone has just built a large plant in Lynn for production of its telephone directories, while Sears, Roebuck & Co. has just opened a regional billing and credit office.

Finally, it should be noted that the Northeast Region includes much of the area served by the circumferential belts Interstate 495 and Route 128. Significant growth areas in the future will be at the junctions of Route 93 and these two highways. Accordingly, the Boston Globe (March 20, 1973) recently reported that two industrial parks are under development in Woburn at the intersection of Interstate 93 and Route 128. Similarly, Hewlett-Packard Corporation recently announced that it will double the size of its medical electronics division in Andover in the 495 area, hiring an additional 5,000 workers. This example is particularly significant, for it will very likely be the kind of light manufacturing typified by medical electronics, requiring highly skilled labor and producing low-bulk products, that will be developed in this area.

Closely related to this aspect of future development in high technology areas is the dependence, present and future, of such industries in the Northeast Region on defense-related expenditures. About 50% of the state's prime defense contracts are allocated to firms within the region. Led by the General Electric plant in Lynn, they are more typically in the towns lying along Route 128 such as Burlington and Wilmington, but also are found in significant numbers in Andover and Lowell.

SOUTHEAST REGION

The Southeast Region is marked by great heterogeneity, including one of the fastest growing areas in the state in terms of employment, the Brockton area, as well as some of the state's most economically depressed areas around the manufacturing centers of New Bedford and Fall River , and the resort areas of Cape Cod, Martha's Vineyard, and Nantucket with virtually no manufacturing. Accordingly, at its northern extreme, the region encompasses some of the affluent South Shore suburbs of Boston such as Scituate and Cohasset while in the south it includes the high unemployment areas within New Bedford and Fall River, Geographically, the region includes all of Plymouth, Barnstable, Dukes, Nantucket and Bristol Counties and a small portion of Norfolk County. It encompasses the Fall River and New Bedford Standard Metropolitan Statistical Areas, most of the Brockton SMSA, and a very small portion of the Pawtucket/Providence/Warwick SMSA.

The Southeast Region can be broken down into three fairly distinct areas: the first comprising the resort areas of Barnstable County (Cape Cod). Dukes County (Martha's Vineyard) and Nantucket County; the second comprising the Brockton SMSA and principally towns along the Atlantic Shore, and third, the extreme southeastern corner of the State including the Fall River and New Bedford SMSA's (and those Massachusetts cities and towns included in the Pawtucket/Providence/Warwick SMSA.)

The Brockton area is characterized by impressive growth over the last decade, particularly in the non-manufacturing sector. While manufacturing employment experienced a ten-year decline of 400 from 1962-1972, the non-manufacturing sector recorded an increase of 12,000 jobs. Accordingly, the population of the Brockton SMSA grew 27% over the decade from 1960-1970 to a total of 190,000; and the city with a population growth of 22%. Predictably, the non-White population increased considerably during this period from 2100 to 4000, while a Spanish speaking community of 1200 emerged during this same period. Despite a booming economy and significant in-migration, the population of foreign stock of the SMSA remained steady over the decade at around 50,400. This contrasts sharly with continued high foreign immigration into the economically depressed areas of Fall River and New Bedford. And finally, in terms of age distribution, the 15-19 age group represented the largest gain in the population with an increase of 57% over the decade, with the 5-14 group trailing with a 43% increase. These increases tend to make the population significantly younger with 40% of the SMSA's population now 19 years old or under (compared with 37% for the State as a whole).

In many respects the Brockton area may be characterized as a boom economy. While overall between 1962 and 1972, 400 manufacturing jobs were lost, between 1960-67 Brockton was actually the fastest growing manufacturing SMSA in the State. Thus were created 18% more jobs (over three thousand) in manufacturing, despite the fact that the Brockton area is largely dependent on industries that are on the decline such as leather and apparel. It was during the years after 1967 that these gains were lost to produce the net loss of 400 jobs seen today. These are partly explained by setbacks in the defense sector and in the business recession of 1970-71. Thus Brockton's unemployment rate of 4.1% in 1969 jumped to 8.6% in 1971.

Overall the leather goods industry, principally shoes, remains one of the leading employers, despite the fact that it is experiencing steady and apparently irreversible decline. During 1972 leather employment was around 3500 down from 6000 in 1962. And between 1970 and 1971 alone there was a loss of 1000 jobs.

Non-manufacturing employment has increased substantially during this time, though less since 1968. Of this category, services have grown the most, 117% over the past ten years. And non-manufacturing will continue to be the main thrust of the economy.

The second area within the Southeast Region looks much less promising than the Brockton area. For example, employment growth for this subregion, including the Fall River and New Bedford SMSA's, has been projected to grow during the period from 1965 to 1980 about 22% while the same figure for the Brockton subregion is about 44%. Overall, the New Bedford and Fall River SMSA's exhibit remarkably similar characteristics. They both have area populations of about 150,000 with substantial proportions of foreign stock, the highest concentration in the State. Those of Portugese stock comprise 18% of the population of the city of New Bedford and roughly one-fourth in the city of Fall River. It is significant also that the immigration of Portugese has increased since 1965, when Portugal was allowed to fill unfilled immigration quotas. In addition, both SMSA's have similar percentages employed in manufacturing, with New Bedford and Fall River ranking fifth and sixth respectively among the State's ten SMSA's in terms of manufacturing employment in 1967. They both have experienced substantial declines in manufacturing employment over the 1960's, specifically in the apparel and textile industries. In addition, both areas rank low in per-employee compensation among the State's ten SMSA's with New Bedford and Fall River ranking ninth and tenth respectively.

Other similarities include ranking low in education for the State. The percentage of persons 25 years of age or older with a high school education in the New Bedford SMSA is 34%, compared with 32% in Fall River, and with 64% for the Boston SMSA. In addition, the median number of school years completed for those 25 and over was 9.5 years in New Bedford SMSA and 9.4 for Fall River, compared to 12.4 for Boston SMSA. And with the core of the SMSA's cities the figures are even more startling: in both the city of New Bedford and the city of Fall River years completed is 8.8. Further similarities include income distribution patterns. Compared to statewide figures of 12% of the families having an income of less than $3,000 and 17% with an income of over 10,000. Both areas rate poorly: 20% of New Bedford area families having income under $3000 and only 8% over 10,000, while in Fall River the figures are 18% and 8%. Another significant similarity occurs in terms of working women. Both areas have high participation rates for women of 43%, compared to a state rate of 38%. Even more importantly however, these two areas have very high rates for working mothers. While the State figure for percent of mothers working is 17%, the figure for New Bedford is 34% and for Fall River 31%.

There are, however, some obvious differences between the two areas. One such concerns minority populations. Blacks comprise 7% of the population for the city of New Bedford and 2% of SMSA's population, while the Puerto Rican population comprises almost 7% of the city's population and about 2% of the SMSA's total. On the other hand, Fall River has very small minority populations with a scant .3% of the SMSA's population being Black and all other groups amounting only to .5% of the area's population. Another difference concerns the fishing industry. While it appears to be negligible for the Fall River area, it is more significant in New Bedford, where an average of 1700 men were employed in this industry in 1966. Since that time employment, however, has declined considerably with an estimated 1300 employed in fishing in 1971 and a further decline down to 1200 in 1972. One of the chief problems in this area is the depletion of domestic fishing grounds by foreign nations, by which some fish stocks have been depleted up to 90% in the last decade. For example, in 1971 the amount caught was 111 million pounds, and in 1972 this dropped to 60 million.

BOSTON REGION

The Boston Region includes the City of Boston and its nearby suburbs. It extends from Medford, Melrose, and Arlington in the north to the communities of Sharon, Stoughton, Avon, Holbrook, and Weymouth in the south. To the west, the Region extends to the towns of Weston and Wellesley. Significantly, the Region encompasses the southern half of the Route 128 ring. Finally, it is worthy of note that except for two small towns that are actually part of the Brockton SMSA, the Boston Region lies totally within the Boston SMSA and is significantly smaller than it.

Generally the Boston Region can be viewed as consisting of three parts: the core city of Boston with a high proportion of the industrial output of the metropolitan area as well as minority population concentrations; the many residential suburbs around the core city; and finally, the Route 128 area, a second node of industrial and economic activity in the Region.

In 1970, the City of Boston had 40% of all the jobs in the metropolitan area and accounted for 46% of the metropolitan area output, though it accounts for 24% of the metropolitan area population. This is an indication of the relative importance of the core city to the economy of the entire metropolitan area. And because the Boston Region is much smaller than the Boston metropolitan area (SMSA), excluding significant areas of economic activity such as the northern half of the Route 128 ring and the city of Lynn, the City of Boston dominates to an even greater degree the Boston Region. One reason why the City of Boston so dominates the metropolitan area output is that its productivity levels are extraordinarily high. In 1970, the productivity for goods and services for the City was $18,700/worker, compared to $16,500/worker for the metropolitan area, and $12,600/worker for the U.S. This high overall rate of productivity is accounted for partly by a doubling of the output per worker in manufacturing within the City over the period from 1947 to 1970. And although manufacturing employment has been steadily declining over this same period, (the City lost nearly 20,000 manufacturing jobs from 1947 to 1967), manufacturing output has actually increased. For example, from 1960 to 1970, manufacturing industries in the City of Boston experienced a 15% growth in production.

While manufacturing employment has been declining, non-manufacturing employment has greatly increased. In 1947 the top four employers in the City were manufacturing (accounting for 22% of the City's total number of jobs); retail trade (18%); transportation (14%); and services (14%). In 1970, the top four were services (23%); retail trade (15%); government (15%); and finance, insurance, and real estate(14%). Thus, from 1947 to 1970 manufacturing and transportation were replaced by government and finance as the City's chief employers.

The demographic data show that from 1960 to 1970, the City of Boston, like most large urban centers in America, suffered a population decline from 697,000 to 641,000. Since 1965, there seems to have been a relative stabilization of the City's population decline; since that time outflow of Whites has diminished and the migration of Blacks from the South has slackened.

The minority populations of the City are significant. A total of 21% of the City's population is made up of minority groups. With more than 71% of the State's minority population to be found in the Boston SMSA, the City of Boston has 77% of the SMSA's minority population. From 1960 to 1970 the non-White population of the City increased from 68,000 to 116,000. And in 1970 the Spanish speaking population of the City was about 18,000.

In terms of income, there has been a significant upward shift in the City during the past decade. During the 1950's the average household personal income of residents of the City rose by 17% and in the 1960's by 40% (in constant 1970 dollars). In addition the proportion of households with income of $15,000 or more increased from 6%(of the total number of households) in 1950, to 13% in 1960, to 18% in 1965 and to 25% in 1968. It is projected that by 1980 two-fifths of all households in the City of Boston may have incomes of $15,000 and over.

However, there are significant numbers of low income people in the City. In 1965, with 28% of all metropolitan area households the City of Boston accounted for 38% of all households with incomes of less than $4,000. Furthermore, the numbers of low income Blacks are increasing. From 1960 to 1965, the number of non-White households with incomes of less than $4,000 increased from 11,000 to 14,000 while the total number of non-White households increased by more than 50%. This means that while in absolute numbers the number of poor Blacks in the City increased, the proportion of such households in the low-income bracket actually declined from 50% in 1960 to 40% in 1965. Finally, over this same period, the average income of non-White households rose slightly with respect to White households; it increased from 75% of white household income to 81%.

For the City of Boston the median number of school years completed for those 25 years and over was 12.1 years in 1970. This breaks down to 12.1 years for whites, 11.4 years for blacks, and 10.8 years for Spanish speaking.

The future of the City looks good, in spite of a few problem areas. One such problem is the termination of some 5,500 jobs at the Boston Navy Yard, to be closed by the Defense Department. Another problem for the City has been the slump in the building boom that transpired during the early and mid-1960's. In recent years the newly built Keystone Office Building near South Station has been largely vacant, and the construction of the Cabot, Cabot, and Forbes office building at the corner of State and Congress streets has been delayed. Of late, however, the construction of this office tower has been resumed, and the Keystone building now appears to have leased nearly all its vacant space. Of greater significance is the recently announced decision by the Boston firm of Stone and Webster not to relocate to the suburbs and to remain in the City and to build a 14-story office building as part of the BRA's South Station urban renewal project. This announcement has been received by the community at large as a bellwether of renewed faith and confidence in the economic future of the City of Boston.

And accordingly, the Boston Globe has reported that a $1.7 billion building program in the City is now under way, with an additional $4.3 billion of additional construction on the drawing boards.

The remaining communities in the Boston Region encompass a broad range of urban and suburban areas: including such urban areas as Somerville and Cambridge; the lower-middle and middle class suburbs north and south of Boston such as Medford, Arlington, Stoughton, Dedham, Canton, and Needham; and finally, the affluent western suburbs such as Weston, Wellesley and Dover. The range of median family incomes among these various suburbs is great. Beginning with a low of $9,594 for Somerville, $9815 for Cambridge, then ranging upward with $15,381 for Newton, $19,401 for Wellesley, $22,716 for Dover, and the high of $23,530 for Weston.

The Route 128 area is dominated by office buildings and light manufacturing. After the recession of 1970-71, with the ensuing layoffs of professionals and technicians, it now appears that the 128 area is staging a recovery. In particular, the office space market is now picking up after a decline, though it is not expected to reach the boom proportions of a few years ago. An example is the on-going construction of the home office of the Boston Mutual Company in Canton. If the conversion efforts of the once heavily defense oriented firms succeed, it is in the light manufacturing sector that the boom is expected, particularly in electronics, computers, and warehousing.

SOURCES FOR REGIONAL ECONOMIC PROFILES ARE:

Berkshire County Development Commission, Berkshire County Community and Economic Data, Pittsfield, Mass., 1971.

Booz, Allen and Hamilton, Cape Cod Economic Base Study: Recommendations for Beneficial Changes, for Cape Cod Planning and Economic Development Commission, 1972.

Division of Employment Security, Annual Manpower Planning Report, Boston, Mass., 1973.

for Springfield - Haverhill SMSA
Worcester SMSA
Lawrence - Haverhill SMSA
Lowell SMSA
Brockton SMSA
Fall River SMSA
New Bedford SMSA
Boston SMSA

Dukes County Planning and Economic Development Commission, Overall Economic Development Program for Dukes County, Mass., Oak Bluffs, Mass., 1972.

Ganz, Alexander and Peter Menconeri, The Expanding City of Boston Economy, Boston Redevelopment Authority, 1970.

Ganz, Alexander and Tina Freeman, Population and Income of the City of Boston, Recent Evolution and Future Perspective, Boston Redevelopment Authority, 1970.

Kenney, Robert J., Jr. and Muehlman, K. Heinz, Economic Changes in Massachusetts, Massachusetts Department of Commerce and Development, Boston, Mass., 1970.

Little, Arthur D., Inc., Fostering Industrial Growth in Massachusetts, Vol. I and II, Cambridge, Mass., 1970.

Little, Arthur D., Inc., New England: An Economic Analysis, for the New England Regional Commission, Boston, Mass., 1968.

Metcalf & Eddy, Inc., Regional Economic Base Study and Development Program -- 1972, Phase I, for Old Colony Planning Council, Brockton, Mass., 1972.

Metropolitan Area Planning Council, Economic Base and Population Study, Vols. I, II, III, for Eastern Massachusetts Regional Planning Project, Boston, Mass., 1967.

Office of Planning and Program Coordination, Statistical Profiles, Executive Office for Administration and Finance, Boston, Mass., 1971.

for Regions One through Eight

Old Colony Planning Council, Overall Economic Development Program, Brockton, Mass., 1973.

Southeastern Regional Planning and Economic Development District, 1971 Annual Surveillance Report for Southeastern Massachusetts, Taunton, Mass., 1971.

Sweetser, Frank L., Massachusetts Social Ecology 1960, prepared for Massachusetts Department of Mental Health, Boston, Mass., 1971.

Viaux, Frederic B., Feasibility Study Concerning the Establishment of a Branch Campus of North Shore CC in Lynn, Mass., North Shore CC, Beverly, Mass., 1971.

U.S. Bureau of the Census, Detailed Characteristics, PC (1) - D23, Washington, D.C., 1972.

U.S. Bureau of the Census, General Social and Economic Characteristics, Massachusetts, PC (1) - C23, Washington, D.C., 1972.

BEST COPY AVAILABLE

F. Estimating the Demand for Nontraditional Learning and "Open Universities"

The Complex Character of Demand for Continuing, Part-time and Nontraditional Study IV-19
Design of a Market Survey (Review of Studies in Other States) IV-70
The Market for an External Degree in Massachusetts. IV-73

BEST COPY AVAILABLE

ESTIMATING THE DEMAND FOR NONTRADITIONAL LEARNING AND OPEN UNIVERSITIES

The Complex Character of Demand for Continuing, Part-Time and Non-Traditional Study

In the last few years educators have become aware of a growing demand for continuing post secondary education. Recent experiments in nontraditional, part-time study have been notably successful and seem to tap a large potential market of students beyond those who have been enrolled in traditional part-time adult education programs. (See Section II.M. for discussion of nontraditional programs.)

As a consequence, there is great interest among institutions and government agencies in proposals for new or expanded programs of continuing post-secondary education to meet the needs of these diverse groups.

But while such programs are being considered, the exact nature, extent and structure of demand is clear neither to educators in the traditional system nor necessarily to the users and potential users themselves for much of potential demand is still unmet by current programs and remains latent in the population. In a sector such as education, where private profit incentives are muted and competition does not lead automatically to an optimal system or even to variety and consumer responsiveness, preferences will not necessarily be discerned. Therefore some form of market survey must systematically be undertaken to anticipate and estimate demand.

The demand for part-time and continuing eduation is particularly difficult to assess because of several characteristics of the market. First, it is a new product; thus projections of current or future demand cannot be made from past experience. The primary example of this is demand for an open university of television courses and packaged programs. Current or past enrollments in part-time programs would give no guide to demand for these kinds of programs. Neither would projection of enrollments based on changes in sociological factors such as age, occupation, urban/rural, etc. (as is done for higher eduation as a whole).

Because some programs are now in existence and some not, demand is composed of two parts: "active" demand, that which is currently being served; and "latent" demand, that which is not met by programs given now. One particular difficulty of a market study is delineating elements of latent demand: what programs would be desirable and under what circumstances demand would become active.

Many students presently excluded from full-time day college programs might also be brought into the educational system through part-time and continuing education. Underserved urban and rural sub-populations do not have adequate information about what is available to them. With improved publicity and communication through other community organizations such as churches, clubs, and public aid agencies, many people might be attracted to continuing education.

Secondly, demand for part-time and continuing education has more than one source; personal, business, and government or societal. Personal demand has two parts: (1) as a personal consumption good in courses such as art history or literature and (2) as an investment good for job advancement by attaining a degree or specific vocational training. Businesses are interested in courses as vocational training for employees and government is interested in manpower training to ease labor shortages and contribute to productivity. These three sources of demand must be considered by a planning agency, and each requires a different method of estimation.

Thirdly, continuing education is a multi-service sector. Demand will vary for diverse possible programs with varied teaching format. Location of study, time of day, type of faculty, cost (and other variables considered by a potential consumer). Estimating future demand in this market is particularly difficult and must be done with care.

Fourth, demand for continuing education programs will change with the economy and social trends. People having more time and money to pursue personal or job advancement goals and a social movement like women's liberation are leading to increases in enrollments. However, such trends are difficult to predict in the future. Thus demand for continuing education is not one single number but varies with many program characteristics and external factors. It would be desirable to know demand for each, but this involves more comprehensive analysis than in the typical consumer market -- toothpaste, for example.

These factors in the market for continuing and part-time education must be considered when planning new programs. Demand from business and the government and social trends of the future are to some extent matters of judgement. Personal demand in the present, however, can be estimated by a well designed market study. A comprehensive market demand study must be very carefully designed if true demand among all population groups is to be determined.

Design of a Market Study (Review of Studies in Other States)

Careful design of a market test of demand specifically for nontraditional learning and "open universities" is crucial to insure accurate results. There are several problems in the technical design of such a market survey. If these problems are not recognized and dealt with, results of the survey may be seriously biased by the methods used. In particular, specific populations may be over or under-represented.

The relevant market surveys conducted to date are: an Educational Testing Service direct interview survey of interest across the country in educational activities, a California mail survey of the need for external degree programs, a Colorado direct interview survey of educational needs, and a Massachusetts telephone survey of interest in a proposed open university. The results of these surveys are discussed in Section IV.B..[1]

The first problem in a market survey is narrowing down the proposed new "product" to specifics. The potential for combinations of new programs is very great and "demand" will vary with each combination of type of program offered, location, time, tuition, and other variables considered by the consumer. It would be desirable to know the demand for each combination but this is not possible. A market survey must usually be focussed on a particular program.

However, narrowing the demand analysis down to a specifically proposed program has certain effects which must be recognized. In the California survey of demand for an external degree at the college or graduate level, the proposed program was exclusively focused on those people who already have 60 units of college credit and are willing to pay $105 a course. The result that well-educated, high income people are interested in the program, while less-educated, low-income people are not, is therefore to be expected. However, there is a tendency to generalize the results of this study to say that less-educated, low income people are not interested in any educational programs. This may not be the case: in the California survey by virtue of the proposed program, they were excluded from being questioned.

Second, there is always a problem of knowing if the response of a person to a questionnaire is a true reflection of what he would do if the program were offered. It is likely that fewer people would enroll initially in a program than say they would in response to a questionnaire. The exact percentage is hard to determine, however.

Interest expressed in a survey can be discounted in three ways. First, pilot programs may be started in one area and actual enrollments compared with interest previously predicted by a survey. In California, such a procedure is being used to calculate a discount factor in one county which has a new pilot program for other proposed programs.

A second technique is to test market demand in a survey for current programs and see if it matches actual attendance in programs. For example, respondents may be asked in a parallel fashion to other questions if they would attend programs already in existence. If interest expressed as projected onto the population was less than actual attendance in the population, a discount factor would be calculated.

In California, a third technique was used. The survey was carried out in two stages of mailed questionnaires to be returned. In the first stage, 8% of the original sample returned the questionnaire. These people were sent a second questionnaire and about a quarter to a third of these were returned. In the end, 2-3% of the original sample was included. It was assumed that if a person bothered to answer both questionnaires, he would be seriously interested in enrolling in the proposed program. Making the procedure difficult and time-consuming would exclude those with only mild interest.

Third, and most serious, is the problem of selecting a sample of the population to be surveyed. The purpose of a survey, in this case, is to determine as accurately as possible the interest of the whole population in the proposed program. If the sample is well-designed, the responses of only several thousand people can reflect the preferences of population of millions. To be able to project survey results onto the population, however, the sample must be representative of that population. All types of people must be questioned in proportion to their numbers in the population or the results will be biased.

Answers to questionnaires are likely to vary with the type of person responding. For example, people over 45 may respond to certain questions differently from people under 45. Unless the sample is designed to include representative proportions of under 45 and over 45 people, the preferences of one group will dominate preferences of the other group. If x% of the population is over 45, then x% of the sampled people should be over 45 to insure a true reflection of the population's preferences.

A random sample of the population using Census data may be made, but the major difficulty is then in locating the people to be questioned. A telephone survey may be less expensive than a direct personal interview, but many people are not reachable by telephone. Finding people at home for a direct personal interview may also be difficult. The Educational Testing Service found in their survey of adults that people living in rural areas or apartment complexes in central cities are harder to contact and identify than those in suburban homes.

For one reason or another, certain types of people in the population may be over-represented or under-represented in the sample. Blacks aged 18-35, for example, may be under-represented because they may be hard to locate. Others may not want to answer questions.

There is, however, a method of adjusting the sample for such difficulties. The responses of each type of person may be weighted by the proportion that they are in the total population. This method was used in the ETS survey.

ETS found, for example, that questionnaire completion was higher among women than men, higher for younger white women than for older white women, and higher for those who had been to college than for those who had not. Thus, in the original sample white women under 45 who had been to college were over-represented by a factor of two. By weighting their responses by 0.45, they were properly represented in the corrected sample. On the other hand, Black men who had not graduated from high school were under-represented in the original, uncorrected sample, and were thus weighted by 2.20.

A similar weighting procedure was used for types of respondents varying by sex, age, race, and educational attainment. A survey sample was constructed comparable to the general American adult population.

Such a procedure of weighting was not used in the California sample, in the Colorado sample, or in the market survey in Massachusetts. A footnote may be attached, as in the Colorado survey, to indicate that the sample was not representative of the population. But the tendency of readers is to discount this problem and make generalizations as if it were a representative sample of the population.

This tendency to generalize is especially strong among planners in one state using results generated in another state. It is also a risk for policymakers in the state being studied. They may not have the time to analyze detailed methodology and may proceed to use uncorrected survey results for making policy and funding decisions on the assumption that they reflect the population at large.

The effects of this tendency to generalize uncorrected survey results can be quite serious. The results of the Becker telephone survey of interest in the proposed Massachusetts Open University concept clarify this problem.[2]

The Market for an External Degree in Massachusetts:

Any educational market determination has four necessary steps:

Step (1): The extent of interest people have in the proposed educational option must be determined for the various groups in the population.

Step (2): The willingness of those interested people to pay for the option must be determined.

Step (3): The percentage of each group in the population that is both very interested and very willing to pay must be determined.

Step (4): The results of interest and willingness to pay must be generalized to the population at large.

While a variety of standard survey techniques (mail, telephone, direct interview surveys) for determining preferences are suitable for Steps (1) - (3), the problem of step (4) requires the use of demographic analysis. The determination of preferences of each group must be combined with techniques of projection onto the population.

This study and the Becker study are in agreement about preferences determined in Steps (1) - (3). The findings of those three steps in the Becker study are corroborated by the independent findings of the continuing education student survey conducted as a part of this study (see Sections III.A.4. and IV.B.).

However, the two studies diverge in their analysis of Step (4), the projection of preferences onto the population. This divergence leads to appreciably different conclusions regarding the composition of the prime market for an open university and hence regarding the public policy issues surrounding the focus of the proposed Massachusetts Open University.

Interest in an external degree program was tested by Becker through a telephone survey of a sample of the Massachusetts population 18 and over. The study concluded that since less-educated citizens are less interested in the program than better-educated citizens, only 13% of the prime potential market for the external degree would be at the level of high school incomplete. (Those eligible for the program must have at least some high school education but no more than a college degree.) This study finds the above figure to be 25%, not 13%. The difference arises because this study has used Massachusetts Census data for all its student clientele and demographic analyses, while the Becker study has used its telephone survey sample. The causes of these differences are explained below, and their implications for Massachusetts policy and planning for an open university discussed.

However, the Becker survey only went to households having telephones and thus over-represented high education, high income, high occupational people and under-represented low education, low income, and low occupational people. This is because the poor, handicapped, and elderly with less education may not have telephones or may be institutionalized, the less-educated people who do have telephones may refuse to answer questions and admit their low status, and at any given household the better-educated person is more likely to answer the telephone than the less-educated.

Thus, the educational profile of the respondents to the Becker telephone survey differs significantly from the educational profile of the Massachusetts population 18 and over (used for all comparisons and clientele analysis in this study, see Section III.B.).

Educational Profile: 18 and Over

	U. S. Census Data for Massachusetts		Becker Telephone Survey	
college graduates	452,000(a)	12%	750,000	25%
1-3 years college	658,000(b)	17%	810,000	28%
high school diploma	1,254,000(c)	33%	1,020,000	34%
high school	712,000(d)	19%	270,000	8%
less than high school	725,000(e)	18%	150,000	5%
TOTAL:	3,803,000		3,000,000	

(a)	394,000	25 and over
	58,000	18-24(8.8% of 660,000)
	452,000	
(b)	346,000	25 and over
	312,000	18-24 where assume 80% are high school graduates, 70% of these go on (.8 x .7 x 660,000 - 58,000 college graduates)
(c)	1,096,000	25 and over
	158,000	18-24 where assume 80% are high school graduates and 30% do not go on (.8 x .3 x 660,000)

(d)	593,000	25 and over
	119,000	18-24 where 17.5% get to high school, but do not graduate
(e)	712,000	25 and over
	13,000	18-24 drop out before high school (2.5%)

Similar discrepancies between a telephone sample and the population exist in income and occupational profiles. The comparisons of U.S. Census data and the Becker survey sample are shown below.

Occupational Profile

Occupation	U. S. Census Data for Massachusetts[a] (Males only, 16 and over)	Becker Telephone Survey (Males and females)
Professional/technical	17%	26%
Managerial	8%	16%
Clerical	20%	5%
Sales	7%	7%
Craftsmen/foremen	13%	17%
Operators	18%	7%
Laborers	4%	3%
Service Workers	12%	5%
Other		13%

(a) Note profile for males only, because they have generally higher occupational status than women. Even so the Becker data is heavily weighted toward upper occupational groups in comparison.

Income Profile

Family Income	(Families and Unrelated[a])	(b), (c)
less than $5,000	30%	10%
$5,000 - $6,999	11%	8%
$7,000 - $7,999	6%	4%
$8,000 - $9,999	12%	13%
$10,000 - $14,999	23%	33%
$15,000 - $24,999	14%	23%
$25,000 and over	4%	8%

(a) Families and single people are included to be comparable with the Becker sample.
(b) Adjusted upwards for 20% not answering as reported in the Becker report.
(c) Adjusted to U.S. Census categories of income by extrapolation.

These differences in methodology determine variations in demand estimates and have implications for difficult decisions in public policy. The analysis of demand does not lead automatically to policy conclusions; the simple existence of demand does not mean that it should or can be met. Rather, the institutions and governments involved must decide what alternative programs should be funded or subsidized given identified demand, the cost constraints on the budget and other aims of the state such as manpower planning. If demand exists among several different groups, then state policy must determine which groups will take priority in being served. Consider then the alternative assessments of the "broad potential market" and the "prime market" for an external degree in Massachusetts as presented by the Becker study and by this study.

Broad Potential Market*for an External Degree in Massachusetts

	This study (Based on U.S. Census)	Becker Telephone Sample
1-3 years college	25%	40%
high school diploma	48%	48%
high school incomplete	27%	11%

* By definition those with less than a college degree, at least some high school.

From this table, the prime market is determined in the Becker study from the interest expressed by each subset of the broad potential market. In this study the responses of each group are weighted by their proportion in the population, rather than by their size in the telephone sample. Thus a different estimate of the prime market is derived.

Prime Market for an External Degree in Massachusetts

	This study (a) (Based on U.S. Census)	Becker (b) Telephone Survey Results
1-3 years college	39%	40%
high school diploma	36%	44%
high school incomplete	25%	13%

(a) This profile was constructed from Tables 1 and 2 (pages 3 and 5) of the Becker report showing interest and willingness to pay of each group and the distribution above of the broad potential market.

(b) Some non-response accounts for the fact that this column does not add up to 100%.

Thus if the extent of interest expressed in the external degree by those people with only some high school actually reached on the telephone in the Becker survey is projected onto the Massachusetts Census group of people in this category, with or without telephones, then they would comprise 25% (not 13%) of the prime potential market. Because some people in institutions or disabled may have no interest in the external degree, yet are included in the Census, 25% is the upper limit for this group's representation in the prime potential market. The 13% of the telephone sample is the lower limit.

This difference is important because taken together, the Becker estimates and this study's estimates (above) of the composition of the prime market for the Massachusetts Open University bracket the true prime market composition. The Becker results emphasize the demand among better-educated groups and this study emphasizes the demand among less-educated groups.

The policy implications for an Open University in Massachusetts are considerable. If policymakers rely solely on the telephone survey demand data in designing the proposed Massachusetts Open University, then the resulting institution will favor the more educated, higher income and higher occupational status Massachusetts adults. Planning for the educational needs of poorer, less educated, lower occupational status adults will be inadequate.

This problem is particularly serious, since better-educated people are already being served by the current continuing education system, while less-educated people are not. Comparing the interest of citizens in Massachusetts as expressed in the Becker survey, and weighted by this study to reflect the total population, with actual participation in current continuing education programs is startling. While 25% of those interested and willing to pay for an external degree program have less than a high school diploma, only 2-3% of those currently enrolled in continuing education have less than a high school diploma. Of the students who would technically be eligible for the open university (less than college degree), those with less than high school comprise 5% of the total.

	Prime Market for External Degree (Weighted estimate) of this study	Current Continuing Education Students in Massachusetts
1-3 years college	39%	68%
high school diploma	36%	26%
less than high school diploma	25%	5%

(a) Some students included in the student questionnaire may have received a high school equivalency since entering the program, but it is unlikely that the results of this table would be substantially altered by this consideration.

If people at the 1-3 years of college level are being served by the current continuing education system, while those with less than a high school diploma are not, there is a case for designing the Massachusetts Open University to focus on the unmet needs of the less-educated.

The exclusion of lower income, occupation and education groups from current systems of continuing education is partially due to less interest on their part, partially to an inadequate response of the system to their needs. Although interest in the open university falls in less-educated groups, their interest and willingness to pay is nevertheless substantial as tested in the Becker survey.

Further discussion of the extent of interest by low income and low education groups is in Section IV.B.. The studies discussed also demonstrate that these groups have far more interest in continuing education than is currently being met by the system.

The necessity for planning specific programs to meet the needs of the less-educated stems from the fact that people with less than a high school diploma do have different interests from people with some college, according to the ETS survey of 1973. They are interested in business, technical and industrial skills, while those with some college are interested in business-management and higher level technical skills and liberal arts.

People with less than a diploma also perceive different barriers to participation in education: cost, no information, low grades, too much red tape, and no transportation. Better-educated individuals find: not enough time and other responsibilities as barriers. Thus planning the Massachusetts Open University on prime market data which are biased toward those of higher educational attainment could discriminate against those most in need of a "second chance" MOU opportunity.

FOOTNOTES

1. Carp, A., Peterson, R., and Roelfs, P., at Educational Testing Service, "Learning Interests and Experiences of Adult Americans," in Cross, K. Patricia and Associates, eds., Planning Nontraditional Programs: An Analysis of the Issues (San Francisco: Jossey-Bass, 1974).

   Siroky, Frank R., The Need for External Degree Programs in California, Report No. 2, Commission on External Degree Programs, California State University and Colleges, January 31, 1973.

   Outreach and Occupational Education in Colorado, A Study Conducted for the Colorado Commission on Higher Education by the Academy for Education Development, September, 1972.

   Becker Research Corporation, The Market for Continuing Education in Massachusetts, Boston, 1973.

2. For a different perspective on the educational profile of Massachusetts residents, the market for continuing education, and the prime market for the Open University based on a telephone survey of Massachusetts residents, see The Market for Continuing Education in Massachusetts, by Becker Research Corporation, Boston, Massachusetts, 1973, a study performed for the Massachusetts State College System.

BEST COPY AVAILABLE

V. LITERATURE REVIEWS OF SELECTED ASPECTS OF CONTINUING AND PART-TIME POSTSECONDARY EDUCATION IN OTHER STATES (ILLUSTRATIVE, NOT EXHAUSTIVE)

A. Historical Overview of National Trends and Recent Developments V-1

B. Connections to Business and Industry V-4

C. Interinstitutional Cooperation and Coordination. V-8

D. Services for Special Clientele V-12

E. Faculty Unionization V-19

F. Federal Role of Continuing Education V-23

BEST COPY AVAILABLE

V.A. Literature Search of National Trends and Recent Developments in Higher Education in Other States: Implications for Continuing and Part-time Education

> What is becoming increasingly apparent is that to solve social problems by changing people is more expensive and usually less productive than approaches that accept people as they are and seek to mend not them but the circumstances around them.[1]

Continuing and part-time education programs, if broadly defined as a means for citizens to learn more at their convenience than that of educational institutions , may be on the verge of making such definition more than conditional. Indeed, the continuing education movement in higher education, often perceived as a sort of stepchild or adjunct function of higher education systems, may prove to be in the vanguard of higher education institutional change.

The history of higher adult education describes themes of public service and sensitivity to particular client needs. The establishment of university extension in 1891 at the Universities of Wisconsin and Kansas, after the earlier establishment of land grant colleges established under the Morrill Act of 1862, and the Smith Lever Act of 1914 setting up the Cooperative Extension Service indicated efforts to meet the needs of government, industry, and agriculture. The turn of the century also saw evening colleges set up in private and usually urban universities. These part-time programs were an answer to working adults who wished to complete college degree programs while employed. Programs of these evening colleges were similar to if not the same courses offered during the day, indicating that the institutions were willing to be available to the citizen, but on their own terms. It was later that these programs became more responsive to the human conditions of urban living.[2] Later decades saw the expansion of labor education, WPA worker education programs conducted during the depression, the use of educational television to increase accessibility to higher education programs, and the impetus from federal legislation to support university extension and continuing education.

The conflict between institutional responsiveness to its client and professional self-interest can be stated in terms of attempts to balance two policies: "1)--the need to consider adult education as an extension of the whole university, with the careful preservation of the right of the respective departments and schools to establish and maintain standards which their subject matter or professional responsibilities dictate; 2)--the need to coordinate the work in the field so that there can be proper focus and balance of services in terms of the needs and interests of mature clientele ...."[3] The issue is one of how much the client is able to participate in as well as partake of an educational program and how willing the institution is to be actively responsive and not arbitrarily self interested in delivering continuing and part-time education programs.

The widely publicized "Newman Report" of 1971 highlighted this issue in its opening chapter, pointing out that of the more than one million young people who enter college each year, fewer than half will complete two years of study, and only about one third will ever complete a four year course of study. The report noted that the majority of dropouts were not satisfied with college in terms of meeting personal goals and wished to reconsider those goals and assess their interests.[4]

One cannot conclude, therefore, that these dropouts have abandoned education. Probably, it would be wiser to suggest that to the extent that increasing numbers of young citizens have been exposed to some form of higher education, to such an extent will they want to continue their education at some point in the future and after reconsideration of goals. In their often cited study, Volunteers for Learning, Johnstone and Rivera point out that a "most persistent finding in our investigation was that formal educational attainment plays a highly critical role in determining whether or not one enters the ranks of adult student."[5] Pointing out that "the typical adult student today is young, urban, and fairly well educated" and that this under thirty-five adult will comprise some 57 million people by 1982, the study emphasizes that an increase in numbers and higher levels of higher educational attainment will of necessity make adult education more extensive and more of a continuing process than primarily short-term or remedial in nature.[6]

In short, student disaffection in the traditional college years may well point not only to a need for greater institutional sensitivity to student needs but will lead to demands for higher education later in life and in response to a variety of interests and goals, and not only those limited to vocation. For the supposedly linear fit between college degree and vocation is increasingly being questioned and has serious implications for higher education in general, and continuing and part-time education in particular.

An important trend in postsecondary education reported by the Educational Policy Research Center at Syracuse is the increasing tendency of persons to attend proprietary schools rather than colleges and universities and community colleges. The Center's report indicates that increases in enrollments in these "peripheral" institutions has been greater than in other higher education institutions.[7] Lyman A. Glenny at the Center for Research and Development in Higher Education at Berkeley has noted that "enrollment in proprietary schools at the post-secondary level is over one million. Industrial and military schools enroll many more than that. Thus we see a trend for the older student to pay for exactly the type and kind of training which he wants regardless of similar work offered by more traditional colleges and universities."[8]

Furthermore, a Higher Education Center at Berkeley report states that 25 percent fewer graduate degrees will be produced in the 1980's than in the 1970's, and that only about one of these doctorates will be employed in jobs considered to be relevant to level of training.[9] Finally, the Higher Education Amendments of 1972 with federal aid provisions for students attending proprietary trade or technical schools could further compel students to look for specific career or marketable skill preparation as the first step in postsecondary education, delaying fulfillment of aspirations or motivations for liberal arts or advanced professional training, or planning to fulfill these goals on a part-time or continuing education basis. Glenny further concludes:

> Moreover, the external degree, the university without walls, the work-study program, the new emphasis on part-time enrollment, the videotape cassette and closed circuit TV, along with a host of other nontraditional means of offering a college education, will have profound influence on what is and is not done within the walls of the higher education institution. For many years we have discussed the merit of in-and-out education and of continuing adult education for millions of people whose education is incomplete or whose avocational or career interests have changed. Many young people today are not waiting for an institutional, a state, or a national plan to provide that continuing opportunity. They make it for themselves. The new technologies for delivery of education are being quickly grasped by these young adults as well as older persons.[10]

Whether it is due to new educational arrangements or technologies for delivery of programs or a tight employment and economic picture, causing hard looks at costs and relevance of higher education, there is some evidence that something called an "education periphery" is developing, leading to expanded concepts of the learning force. The above cited Johnstone and Rivera study of 1965 is illustrative. As summarized by the National Advisory Council on Education, the study found that 25 million adults were actively involved in adult education programs. About two-thirds of these were enrolled in credit or noncredit courses, and only 40 percent of these courses were conducted by schools, colleges or universities, public or private, and 60 percent by nonschool institutions. An estimated 50 percent of the 25 million adults were earning credits for certificates or diplomas outside the regular or core institutions of higher education.[11]

Findings at the Educational Research Center at Syracuse are further illustrative in attempting specifically to portray the balance between higher educational core and periphery. The educational core is defined as "that sequential ladder of formal educational activity ranging from kindergarten through graduate and professional schools." The educational periphery is described as "the variety of formally organized educational activities ranging from vocationally-oriented programs in business, government, the military, proprietary schools and anti-poverty programs, to cultural and leisure-oriented programs in regular core institutions, religious education, television, correspondence courses, and private associations."[12] As the Table below illustrates, the total learning force is almost evenly divided between the educational core and the educational periphery. Noteworthy is the fact that projections for the '70's show the periphery moving considerably ahead of the core, a trend that was already showing since 1965.

THE LEARNING FORCE (1940-1976)*
(millions)

	1940	1950	1955	1960	1965	Current Estimates 1970	Current Estimates 1976
I. The Educational Core							
1. Preprimary	.7	1.3	2.0	2.7	3.1	4.4	5.5
2. Elementary	20.5	21.0	26.0	29.1	32.0	32.3	30.0
3. Secondary	7.1	6.5	9.3	13.0	16.8	19.8	22.1
4. Undergraduate	1.4	2.4	2.4	3.2	4.9	6.5	8.3
5. Graduate	.1	.2	.2	.4	.6	.8	1.1
Sub-Total	29.8	31.4	39.9	48.8	57.4	63.8	67.0
II. The Educational Periphery							
1. Organizational	8.2	10.2	10.9	13.0	14.5	21.7	27.4
2. Proprietary	2.5	3.5	3.5	4.0	7.8	9.6	18.1
3. Anti-poverty	-	-	-	-	2.8	5.1	7.0
4. Correspondence	2.7	3.4	3.5	4.5	5.0	5.7	6.7
5. TV	-	-	-	.01	5.0	7.5	10.0
6. Other adult	3.9	4.8	5.1	6.8	9.1	10.7	13.2
Sub-Total	17.3	21.9	23.0	28.3	44.2	60.3	82.4
III. The Learning Force (I + II)	47.1	53.3	62.9	76.7	101.6	124.1	149.4

---

*Table in Notes on the Future of Education, Summer 1971, Educational Policy Research Center at Syracuse, p. 3.

The growth of the education periphery has presented political and social problems of legitimacy. The Newman Report states the issue succinctly. While agreeing that higher education degrees from colleges and universities are necessary and useful in strengthening particular institutional missions, the report states that "there is also a conflict between the functions of providing education and certifying competency. The conflict is made more acute because there are no other ways for individuals to become certified."[13] Moses points out that "in the past, in order for Periphery programs to gain legitimization and accreditation, it usually was necessary that they become absorbed with the institutional framework of the core."[14] Interestingly, he further suggests that the periphery

BEST COPY AVAILABLE

in fact serves as a "frontier of innovation and experimentation" with the core "coopting and institutionalizing those programs which demonstrate the greatest viability and success."[15]

The demand for the traditional educational degree as the only legitimate educational credential has been most seriously and thoroughly questioned in a study conducted by Ivar Berg at Columbia University. Berg found that educational credentials did not necessarily influence performance on a job and that in fact employee dissatisfaction and job turnover was related to "overeducation".[16] Other studies cited in the Newman Report indicate that this phenomenon is not limited to blue-collar and white-collar jobs but is also suggested for the professions and persons holding business management positions.[17]

The question raised then is whether training at one kind of institution and in some particular sequence necessarily is "better" than in some other setting, simply by virtue of the setting involved. To date, there would appear to be a bias toward saying that there is a difference. Official accrediting agencies have been reluctant to accept various programs. The result is that more postsecondary degree granting programs are not accredited than are. For example, only 1,000 of about 10,000 proprietary schools which might wish accreditation are actually accredited. It is noteworthy, however, that the Federation of Regional Accrediting commissions of Higher Education (FRACHE) has now established a commission on nontraditional study, suggesting a turning point in "official" reponse to the growth of the education periphery.[18]

Current college and university admissions trends in Massachusetts reported in a recent Boston Globe survey indicate an increasing student demand for career programs yielding marketable skills.[19] To the extent that the core higher educational system offers such programs, thus coopting and legitimizing the educational concerns of various segments of the education periphery such as continuing education programs, to such an extent the periphery could lose its identity. It seems clear that the periphery is beginning to be recognized as more essential than extra. The irony may be that such recognition could come at the expense of its existence.

Footnotes

1. Amitai Etzioni, in the Saturday Review, June 3, 1972, pp. 45-46.

2. Malcolm S. Knowles. Higher Education in the United States, American Council on Education (Washington, 1969), pp. 9-11.

3. Ibid., p.3.

4. Frank Newman, et al., Report on Higher Education, U.S. Department of Health, Education and Welfare (Washington, 1971), Chapter 1.

5. W. C. Johnstone and Ramon J. Rivera. Volunteers for Learning. Aldine Publishing Co. (Chicago, 1965), p. 21.

6. Ibid., pp. 19-22.

7. Stanley Moses. "Notes on the Learning Force" Notes on the Future of Education, February, 1970. (Syracuse University),p. 7.

8. Lyman A. Glenny. "The Changing Milieu of Post-secondary Education" (Address delivered to the National Higher Education Management Seminar) (Washington, 1972), p. 9.

9. Allan Cartter . "Graduate Education in a Decade of Radical Change." The Research Reporter. Center for Research and Development in Higher Education, University of California (Berkeley, 1971), Vol. VI, 1, pp. 5-6.

10. Glenny, op. cit., pp. 12-13.

11. National Advisory Council on Adult Education. UNESCO Questionnaire. (Washington, 1971), pp. II-2, II-3.

12. Stanley Moses. "The 'New' Domain of Post-secondary Education" Notes on the Future of Education. Summer, 1971 (Syracuse University) p. 2.

13. Newman, op. cit., p. 41.

14. Moses, op. cit., p. 4.

15. Ibid., p. 15.

16. Ivar Berg, Education and Jobs: The Great Training Robbery. Praeger (New York, 1970).

17. Newman, op. cit., p. 39.

18. Newman II Task Force "Accreditation and Institutional Eligibility" (working paper draft) (Washington, 1972).

19. Boston Globe, May 9, 1973.

BIBLIOGRAPHY

Berg, Ivar. Education and Jobs: The Great Training Robbery. Praeger, New York, 1970.

Johnstone, W. C. and Rivera, Ramon J. Volunteers for Learning. Aldine Publishing Co., Chicago, 1965.

BEST COPY AVAILABLE

Knowles, Malcolm. The Adult Education Movement in the United States. Holt, Rinehart and Winston, Inc. New York, 1962.

________. Higher Adult Education in the United States. American Council on Education. Washington, 1969.

Liveright, A. A. A Study of Adult Education in the United States. Center for the Study of Liberal Education for Adults at Boston University. Boston, 1968.

Glenny, Lyman A. "The Changing Milieu of Post-secondary Education" (Address delivered to the National Higher Education Management Seminar). Washington, D. C., 1972.

Grattan, Hartley C. In Quest of Knowledge. Arno Press and The New York Times. New York, 1971.

Houle, Cyril O. The Design of Education. Jossey-Bass Inc., San Francisco, 1972.

________, and Nelson, Charles A. The University, the Citizen and World Affairs. American Council on Education, Washington, D.C., 1956.

Moses, Stanley. "The 'New' Domain of Post-secondary Education". Notes on the Future of Education. Educational Policy Research Center of Syracuse University. Syracuse, New York, 1971.

National Advisory Council on Adult Education. UNESCO Questionnaire, Washington, D. C., 1971.

Newman, Frank, et al. Report on Higher Education. U. S. Department of Health, Education and Welfare. Washington, D.C., 1971.

Rauch, David B. (ed.). Priorities in Adult Education. The MacMillan Company, New York, 1972.

V.B.I. Literature Search of Examples of Relations with Business and Industry and Higher Education in Other States: Implications for Continuing and Part-time Education

Under the general topic of "relations with business and industry" in looking through the available literature (course offerings bulletins, state planning reports) the attempt has been made to zero in on two specific facets of the question: (1) relations between educational institutions and business and industry on the planning level and (2) relations between the two as indicated by examples of specific joint programs.

(1) On the Planning Level

For the most part all of the States pay lip service to the notion that an increasingly technological society will require more educated and technically skilled labor. Most of them, however, don't go beyond this mere assertion, and if they do, it is only to propose the initiation of detailed manpower studies and projections. Typical is this statement from the Higher Education Management Review and Analysis for the State of Oregon:

> The lack of documented academic plans is a major deficiency of the Oregon State System of Higher Education. There has been insufficient effort to develop an academic plan which would reflect changes in technology and their effect upon an institution or the system as a whole. It is somewhat ironical-but not unique to Oregon-that research on education itself to reflect the needs of the economy and society in general. . . has not been conducted.[1]

The report goes on to call for a state-wide master plan.

More specifically, the State of Vermont has under consideration a proposal for the establishment of a Coordinating Council for Post-secondary Education that will assess economic developments and that will include representatives from business, industry, and finance.[2]

A similar proposal has been made in the State of Indiana where the lack of a systematic manpower analysis is acknowledged and the establishment of regional "Advisory Committees" is recommended. These committees would include representatives from business, industry, labor, and related professional fields (e.g., health services).[3]

Interestingly enough, the Commonwealth of Puerto Rico seems to have done the most work in this area of detailing manpower needs with regard to educational planning. Though dealing in mostly short-term projections, the Puerto Ricans have specified their needs in terms of engineers, physicians, chemists, agronomists by specific regions of the Commonwealth.[4]

BEST COPY AVAILABLE

BEST COPY AVAILABLE

(2) Examples of Specific Programs

Examples of specific courses that indicate some cooperation between business and industry and educational institutions seem to fall into five somewhat distinct categories: (I) traditionally taught courses that have been set up due to collaboration between business and the educational institution; (II) traditionally taught courses that are taught by businessmen, accountants, insurance agents, etc.; (III) cooperative programs in which students get course credit for on-the-job time that is coordinated with straight classroom work; (IV) conferences, workshops, institutes, and seminars that universities arrange and coordinate for the specific use of outside business firms and organizations; and (V) the ever-present proposals for joint ventures.

(I) Collaborative Efforts.

-at West Coast University in Los Angeles a B.S. in Real Property Administration has been developed in collaboration with the Building Owners and Managers Association International and a B. S. in Accounting developed with representatives of the California Society of Certified Public Accountants.[5]

-at the University of Michigan Extension Service the Real Estate Program, which prepares people for the brokerage license exam and leads to a Certificate in Real Estate, is run with the cooperation of the Michigan Real Estate Association and is taught by teachers (from the School of Business Administration) and by "practitioneers" (i.e., realtors).

-the University of Delaware Division of Continuing Education and the American Institute of Banking run a Cooperative Education Program for academic credit.[6]

(II) Courses Taught by Nonfaculty.

-at the University of Wisconsin Extension the "Business and Management Course is taught by the former industrial relations manager of Frito-Lay.[7]

-at the University of Michigan Extension Service Real Estate Program (mentioned above) courses are taught by realtors, as well as by regular faculty.

(III) Cooperative Programs.

-State A & T College at Farmingdale, New York offers an auto technology course for which on-the-job apprentice work is credited toward the degree.[8]

-the Ohio Department of Education has approved a one-year, full-time adult cooperative program in business and office education in which supervised work experience and class work are alternated weekly.[9]

(IV) Conferences, Workshops, Institutes Arranged by Universities.

-University of Michigan Extension Service has a Conference Department that sets up conferences for outside groups that request their help and the use of their facilities.

-the University of Wyoming University Extension performs a similar service.[10]

-University of Delaware Division of Continuing Education sets up such conferences leading to certificates in management development, computer technology, and plastics technology.[11]

(V) Proposals for Joint Ventures.

-New York Regents propose graduate programs sponsored jointly by industry and universities, but offer no specifics.[12]

-University of Oklahoma proposes: "It is now time for the private sector of the economy and the University to join together to bring both the initial solution of these problems (domestic social problems) and their diffusion to the country generally."[13] Nothing more specific than this is detailed or mentioned.

-in Vermont cooperative ventures with local business and Chambers of Commerce are suggested, particularly in the more technical-vocational fields. The use of business and industrial facilities is even mentioned. But, once again, nothing more specific is offered.[14]

-In California the criteria promulgated by the Commission on External Degree Programs by which the individual state colleges are to evaluate their proposals to the Commission clearly give the go-ahead to cooperative ventures with business and industry. The Commission explicitly states that it is "interested in considering proposals which would. . . extend degree or certificate oriented educational opportunities to employees, in public or private sectors. Such programs might be cooperatively developed with employers, designed, in part, to meet employer needs, utilize employer facilities in instruction, and be subsidized by employers."[15] But once again, no specifics are offered; the Commission is leaving the initiative to form such programs up to the individual colleges.

And one more example of the vagueness with which this subject is approached, in the State of Maine it is concluded: "Higher education has an obligation to join with private enterprise to create more of the short-term, part-time refresher courses to fill this gap if Maine business and industry are to produce at a maximum."[16] Once again, not a single specific recommendation is offered.

FOOTNOTES

1. Warren King and Associates, Inc., Higher Education: Management Review and Analysis (for the State of Oregon) (Chicago, 1970), p. 49.

2. Institute for Educational Development, Higher Education in Vermont: Its Resources and Needs (New York, 1969), pp. 74-75

3. Commission for Higher Education of the State of Indiana, The Indiana Plan for Post-Secondary Education: Phase One - Vol. II: A Pattern for the Future (Indiannapolis, 1972) pp. 54-55.

4. Task Force for Comprehensive Planning of the Council on Higher Education, Higher Education Facilities Comprehensive Planning Study: 1970 Report (Comm. of Puerto Rico, 1971), pp. 36-38.

Office of the President of the University of Puerto Rico, Higher Education Facilities Comprehensive Planning Study: 1969 Report (Comm. of Puerto Rico, 1970), pp. 32-37.

5. West Coast University Bulletin 1972-73, (Los Angeles and Orange Calif.), pp. 54-55.

6. University of Delaware-Division of Continuing Education, Annual Report 1971-72, p. 4.

7. Univ. of Wisconsin Extension Catalogue: Fall 1972, pp. 24-25.

8. "Inside Education" (October 1972), pub. by the New York State Education Dept., p. 3.

9. Kenneth A. Swatt, Continuing Education for Business, South-Western Publishing Co. (West Chicago, Ill.; 1972), p. 13

10. University Extension of the University of Wyoming-Division of Adult Education and Community Service, Annual Report 1970-1971, p. 21.

11. University of Delaware-Division of Continuing Education, Annual Report 1971-1972, pp. 15-17.

12. The University of the State of New York, Education Beyond High School, The State Education Dept. (Albany, 1972), p. 75.

13. Gordon A. Christenson (ed.), The Future of the University, Univ. of Oklahoma Press (Norman, 1969), p. 102.

14. Institute for Educational Development, op.cit., p. 80.

15. The Commission on External Degree Programs of the California State Colleges, "Criteria to be Utilized by the Commission on External Degree Programs in Considering Proposals from the Colleges," p.1.

FOOTNOTES (cont.)

16. Higher Education Planning Commission, Higher Education Planning for Maine (1972), p.13.

BEST COPY AVAILABLE

V.B.2. An Overview of the Connections Between Business and Industry and Continuing Education

In examining the connections between business and industry, on the one hand, and continuing education programs, on the other, it is impor- tant to look at educational needs from the perspective of the (potentially) participating firms. Specifically, it must be asked why some firms develop extensive in-house programs, while others rely largely on existing educational institutions. The parameters of this question fall into two distinct categories. The first entails a set of policy decisions with regard to continuing education needs that all firms must face on a fairly even footing. The second category, however, includes the specific needs and capabilities of individual firms, depending pri- marily on a firm's size and its product, that determine its reliance on internal or external education programs (or the nature of the mix of these two).

Typical of the decisions which all firms must face is whether an educational program should lead to a widely recognized certificate or degree or whether it should be recognized internally with no recognition offered other than promotion within the firm. There are two facets to this question. On the one hand, a degree granting program provides the employee with an incentive, for he knows that his degree will be his own and that it will be potentially useful to him in the future in many circumstances -- and not just within the firm in which he is currently working. On the other hand, precisely because such a degree may provide the individual employee with considerable job mobility, some companies might be understandably reluctant to invest their resources in such a situation.

Another question facing most firms in their decision to develop internal or external programs is the problem of privacy. While eager to take advantage of the resources at near-by universities, some com- panies might prefer not to do so by means of traditional on-campus courses for fear of inadvertent divulging of sensitive information to competitors using the same facilities. The solution here is to hire university personnel on a part-time or consulting basis and to conduct courses on-the-premises for the exclusive participation of the firm's employees.

A somewhat related question is that many companies have found that traditional on-campus courses tend to be too general and do not relate specifically to their unique problems. Again, the solution is to develop in-house programs.

The second category of questions with regard to the development of continuing education programs depends on the specific characteristics of individual firms. One writer has developed a useful typology depicting four groups of industrial firms and their characteristic behavior in meeting educational needs.[1] The first group identified is typified by huge corporations such as General Electric and IBM which have made substantial committments to comprehensive, top-to-bottom educational programs for most managerial, engineering, and technical personnel. Indeed, it is important to note that these technologically oriented companies are large enough to exert monopoly pressure on their markets and are therefore able to pass their educational program costs on to the consumer. Accordingly, they have established extensive internal institutes and education courses, importing the appropriate academic talent when necessary. While these firms also conduct cooperative programs with various universities, in which their employees enroll in traditional graduate courses, their primary emphasis is on in-house efforts.

The second group of firms in this typology consists of those which are as large as those in the first and equally capable of passing on the costs of extensive educational programs to the consumer but which for various reasons have been much less committed to overall educational programs. Typical of this group are the auto manufacturers, General Motors and Ford, both of which are less dependent upon technological innovation than the firms in Group I. And although they exhibit very different approaches, they do devote some attention to this area--just much less than their counterparts in Group I. For example, General Motors relies principally on its degree granting engineering school, the General Motors Institute, while Ford has rather idiosyncratically relied on existing educational institutions, particularly in the Detroit area.

The third group is composed of the smaller, though national, firms which have specific well defined educational needs but which have rela- tively limited resources to meet them. Unlike the giants of Groups I and II they are tied precariously to the ups and down of the national economy, and they cannot pass on the high cost of educational programs to their customers. Furthermore, they simply cannot afford the per- sonnel to develop appropriate programs, nor can they afford the loss of man-hours implicit in any extensive management development program. Typical of this group are United Airlines and Continental Can Company. These are the firms most intent upon developing cooperative programs with nearby colleges and universities, though they also rely on various on- the-job programs and increasingly are forced to turn to educational con- sulting firms.

The fourth group, probably the most relevant for Massachusetts, is the special case of the specialized science and,technology firms, typi- fied by any number of the electronics or instrumentations companies that have come to Massachusetts in the past twenty years. These face par- ticularly intense educational problems, for they face inexorable pressure to keep their engineers and scientists on the frontiers of their fields. This group seems to rely on a mix of several different solutions. One is the joint development of facilities by companies with similar needs. In Northern New Jersey, for example, a group of eight companies, inclu- ding Bell Laboratories, Esso Research, RCA Laboratories, American Cyana- mid, and Union Carbide, is establishing a graduate science and technology institute that will grant master's and doctoral degrees. Another solution,

BEST COPY AVAILABLE

for individual firms, is to rely on near-by universities on a tuition-refund plan by which employees are reimbursed for the courses they take. Here the problem, discussed above, of traditional courses not meeting the specific needs of individual firms emerges. In such cases in-house programs are being inaugurated to supplement the on-campus courses.

With regard to the Massachusetts economy and its developing continuing education needs, the relevance of this typology is clear. Given the relative unimportance within the State's economy of such industrial giants as found in Groups I and II, the needs of these types of firms need not figure largely into educational planning for the Commonwealth. However, given the relative importance of those firms in Groups III and IV, particularly the latter group which includes the high-growth science and technology industries, their continuing education needs must be dealt with. Of particular importance is their tendency to rely relatively heavily on external programs, specifically on cooperative efforts with near-by universities.

Footnote

1. Sally J. Olson, Changing Patterns in Continuing Education for Business, The Center for the Study of Liberal Education for Adults at Boston University (Boston, 1967), pp. 10-41.

V.C. Literature Search of Examples of Cooperation and Coordination in Higher Education in Other States: Implications for Continuing and Part-time Education

The relationship between inter-institutional cooperation in higher education and continuing or part-time education programs or arrangements is noteworthy by virtue of the fact that the relationship is rarely made explicit, particularly for part-time programs. A review of a variety of documents from some 30 states illustrates that efforts at cooperation and coordination can foster part-time and continuing education opportunities. The fact that descriptions of these efforts do not necessarily emphasize part-time and continuing education would suggest that to the extent that cooperative efforts go forward, to a similar extent educational arrangements described as part-time and continuing will become absorbed into the natural fabric of higher education. These arrangements will be no less important for having been absorbed. Rather, they could well assume greater importance by describing what "regular" education will be all about in the future.

The relationship between interinstitutional cooperation and continuing education is most explicitly described for New York State. Possibly this is a result of the fact that there are about 425 interinstitutional cooperative arrangements in the State, representing over 90 percent of the State's higher education institutions. Also, various state education plans of the New York Board of Regents are noteworthy in their identification of interinstitutional cooperation as a priority concern.

Education information centers have been operated by S.U.N.Y. at Buffalo in association with private institutions in the city and surrounding region. These provide counseling, tutoring and educational programs for the various neighborhoods of the respective institutions. S.U.N.Y. at Albany in cooperation with private colleges in the area has been running leadership training programs for the black communities in Schenectady, Troy and Albany. Hofstra University has been acting as the administrator of a project to establish a regional network of institutions of higher education and counseling agencies for the provision of adult education, training and counseling services to disadvantaged and poor adults. Community oriented continuing education programs for four Staten Island Colleges have been coordinated by these institutions -- one public and three private -- together with community agencies in an effort to confront various economic and social problems of area citizens. The College Center of the Finger Lakes, a consortium of public and private higher education institutions, has provided a number of continuing education programs for faculty and administrators in the social sciences as well as professional courses for engineers and management personnel.

These are but a few of the cooperative programs operating in New York, selected here for their specific involvement in continuing education. Most of these received their impetus through federal funding and involve both public and private institutions. A variety of other cooperative programs that can be construed as continuing education in such areas as teacher training and manpower development are also operated through interinstitutional arrangements, public and private, in the State. Finally the ex-

BEST COPY AVAILABLE

ternal degree opportunities of the State's open university. Empire State
College, represents a collaborative arrangement related to continuing ed-
ucation in that the target population of the College is defined as persons
of various ages and stages of educational and professional development or
interest, and the fact that the college's learning centers draw on the re-
sources of a variety of higher education institutions for administration
and implementation of programs.

Where in New York continuing education may be said to be a result and
beneficiary of interinstitutional cooperation, a contrasting situation
exists in Oregon. Specifically, Oregon's Division of Continuing Education
is responsible as an arm of the Oregon State Board of Higher Education for
coordinating the higher education resources of the state to provide con-
tinuing education services as needed by the citizens. Board guidelines for
the Division include the following:[1]

1. To play a significant role in the development of regional
planning efforts designed to provide in each of the 14 ad-
ministrative regions of Oregon coordinated planning and
administration of continuing education.

4. To develop -- with the institutions of the state system --
coordinated offerings of continuing education credit courses
and noncredit courses, conferences and programs. . .

4-d. As a general principle, continuing education programs
utilizing staff and/or other resources of the institutions
shall, except in special cases, be thoroughly integrated
with the appropriate instructional departments of the
campus(es).

Higher education coordination in Oregon can, therefore, be said to
have received considerable impetus and initiative from continuing education
programs. While such coordination may be seen as less interinstitutional
than in the case of New York and more between the State Board and individual
institution, the future may compel greater initiatives on the part of the
institutions themselves.

Significantly, in the same year that the above noted guidelines were
set forth, the Oregon legislature moved that it would no longer appropriate
from the general fund to support continuing education but would put continu-
ing education on a completely self supporting basis. In the light of this
action, the guidelines assume greater significance in that the mandate for
regional planning and coordination of continuing education and thorough in-
tegration with campus departments of continuing education implies greater
responsibility for individual higher education institutions of the state.
The Division, accordingly, reports that it has reduced its staff, reorgan-
ized remaining staff, sought support from nonstate sources, discontinued
program services for individuals and groups unable to pay costs of instruc-
tion, cancelled classes which fail to recover direct costs of instruction,
and implemented other cutback measures. Programs reported as being affected
by the cutback include sciences, social work and allied human services,
law enforcement and corrections.[2]

While not directly stated, interinstitutional cooperation in Oregon --
economies of shared faculty and resources -- could be a means of countering
the phasing out of state funds for continuing education with the Division
of Continuing Education playing a significant coordinating and administrative
role. Oregon presents a situation where continuing education may well be
the agent of interinstitutional cooperation rather than its product.

Formal efforts for interinstitutional cooperation and their implica-
tions for continuing education describe a somewhat different picture in
Illinois. Specifically, State government played a very specific role in
promoting interinstitutional cooperation. The Illinois General Assembly
passed a bill specifically designated as the "Higher Education Cooperation
Act" which proposed and provided grant funds for cooperative programs be-
between public higher education institutions and between public and private
institutions of higher education. While again, continuing education is not
stated as a goal of either the legislation or many of the cooperative pro-
grams involved in receiving grants, the purposes of these programs can be
can be seen as having potential for continuing education. More significant is the
role of the State and the cooperation between public and private institutions.

Equally significant for continuing and part-time education is the de-
velopment of an open University in Illinois, Lincoln State University, whose
purposes are to provide alternative methods for earning degrees, further in-
terinstitutional cooperation, and offer degree and nondegree courses while
utilizing a variety of educational resources in the State depending on
the needs of citizens. Lincoln State is another example of the possibility
for part-time and continuing education patterns becoming in reality the way
of life for an entire educational system, not simply the educational "extras"
of the system.

The above described examples call attention to the previously stated
observation that the relationship between continuing or part-time education
and interinstitutional cooperation may be explicit or inferred. Descriptions
of a variety of existing or proposed cooperative arrangements across the
country would substantiate this observation. Possibly this is the result
of the fact that there have been few studies assessing the extent to which
cooperative arrangements have achieved their purported goals. A report for
the California Coordinating Council for Higher Education notes the following:

> If a cooperative arrangement remains in existence for more
> than a few years, it is usually assumed by outsiders to be
> successful, either in terms of its initial objectives or
> in relation to purposes which only revealed themselves
> after the initial decision to cooperate had been made.[3]
>
> (emphasis the author)

BEST COPY AVAILABLE

California offers several cooperative arrangements, existing or in development, that would illustrate contrasts in goals. The Claremont Colleges, made up of five undergraduate colleges and a graduate school and considered to be the first educational consortium arrangement in the country, has as a major objective resource sharing in order to provide more efficiently and economically academic programs of high quality. No particular emphasis is indicated relating to part-time or continuing education. On the other hand, the San Francisco Consortium, made up of seven public and private institutions of higher education, includes as a major goal service to the urban environment through such efforts as extension education programs and interinstitutional programs to serve urban disadvantaged children. Continuing education is indicated in the aim or the Consortium to improve the urban environment through provision of public service programs by the participating institutions.

Between these two examples of cooperative programs in California are several proposed or developing programs that would seem to embrace both types of objectives -- academic and public service. These include the "1,000-Mile Campus" concept in which the California Universities and Colleges would develop statewide curricula to serve a variety of target populations often not served through regular campus higher education programs. A specific example noted was employees of California public agencies. Also proposed with particular reference to part-time students has been a university-wide consortium of campuses called "New College" whose purpose would be to develop and offer degree programs throughout the state for part-time students unable to enroll in campus-based programs.

The consortium movement is not only a growing area for interinstitutional cooperation but also represents a structure for furthering part-time and continuing education. Between 1925 and 1948 four consortia were established. Between 1965 and 1970, thirty two consortia were established, indicating the acceleration that has brought the total today to approximately sixty-one consortia as defined in *Consortia in American Higher Education* by Lewis D. Patterson. Descriptions of these arrangements do not always make explicit references to part-time and continuing education; but the various consortia patterns, including at least 32 involving both public and private institutions, describe such arrangments as cross registration, joint admissions, interdepartmental committees, and other arrangements indicating flexibility and transferability needed to further continuing and part-time educational efforts. Specifically relevant is the Brooklyn Institutional Council, the Chicago Consortium of Colleges and Universities, Cleveland Commission on Higher Education, Kansas City Regional Council for Higher Education, New Orleans Consortium, Pittsburgh Council on Higher Education, Triangle Association of Colleges of South Carolina and Georgia, and Worcester Consortium of Higher Education, Inc.

Several other proposed or existing mechanisms for interinstitutional cooperation are noteworthy for their direct or indirect implications for part-time and continuing education. The Community Colleges of Vermont, where communities throughout the State *are* the College, operates a noncollege system of education utilizing talents and resources of various communities in offering credit and noncredit courses and individually designed programs that may include internships, on-the-job training, and independent study on a low or no tuition basis. Minnesota's Metropolitan State College focuses attention on the educational and public service needs of Minneapolis and St. Paul. Drawing faculty and resource personnel from these cities and the State's six state colleges, the College through flexible programming serves populations whose needs include, beginning or completing a college program, professional or occupational retraining, or unique educational needs not met by other institutions.

Similarly, New Jersey's Thomas A. Edison College provides a non-campus setting. Utilizing a variety of institutional situations besides classrooms, the College provides on-the-job training, adult education programs, independent study, correspondence courses and other educational options which may provide credit toward a degree program. Wisconsin's proposed "Open School" is another cooperative arrangement to teach part-time students and other populations unable to meet regular campus program schedules. The School's board will consist of representatives of the public higher education system the private higher education sector, industry, and student bodies.

Recommendations in several state higher education commissions or boards are indicative of relevant trends in other states. The Colorado Commission on Higher Education has proposed reciprocal credit system as one of its recommendations for continuing education in the State's colleges. The program would be a cooperative arrangement where colleges would accept credit for selected courses offered in other participating institutions as if the course were given at the "home" institution. The South Carolina Commission on Higher Education has recommended that a system of coordination of continuing education be established, including a full-time member of the Commission staff to direct such coordination. The Commission further recommended standing advisory committees to assist in the development of interinstitutional and interagency cooperation in developing a statewide system of continuing education.

Many of the above noted arrangements and proposals have included the use of media as a means of further resource sharing and interinstitutional cooperation in the interests of servicing wider student bodies. The Chicago Junior College of the Air remains as a pioneer effort, offering courses to Chicago area residents through the educational resources of the metropolitan area. A more recent development is the Indiana Higher Education Telecommunication System (IHETS) which consists of a network of telephone lines connecting campuses throughout the state over which televised instructional programs may be transmitted. Variations on television or telecommunications systems are offered and proposed in a variety of other cooperative higher

BEST COPY AVAILABLE

education programs; for example, the above noted Wisconsin Open School.
TAGER--The Association of Graduate Education and Research of North Texas--
is a consortium of public and private universities and colleges that are
linked by a closed circuit television system in an effort to cover long
distances between higher education institutions, meeting regional needs
and creating greater accessibility to programs. The network includes
twelve industrial plants with in-plant receiving classrooms, affording
professional development for management.

While the above overview of cooperative higher education activities
is clearly not a definitive survey, it does suggest certain trends. State
higher education programs and institutions are moving to reach wider
audiences through a variety of cooperative arrangements. It is not clear
that such efforts are specifically directed toward something called con-
tinuing or part-time education; but these efforts would appear to be
addressing audiences now falling under these educational rubrics. Again,
what is suggested is that to the extent higher education becomes a more
systematic network -- through the use of media or more specific adminis-
trative mechanisms of coordination -- in attempting to reach more citizens,
to that extent continuing or part-time education could become a more pre-
vailing description of education than the "adjunct" category into which
such programs now often fall.

Footnotes

1. See Bibliography, report of the Oregon Division of Continuing Education, pp. 41-45.

2. Op. cit., pp. 23-25.

3. See bibliography, California Research Consultants report to the California Coordinating Council for Higher Education, pp. 11, 12.

BIBLIOGRAPHY

Academy for Educational Development, "Alliance for Greatness." Delaware Higher Educational Aid Advisory Commission. Wilmington, 1969.

California Coordinating Council for Higher Education. "1971 Annual Report." Sacramento, 1971.

California Legislature. "Report of the Joint Committee on the Master Plan for Higher Education." (Draft). Sacramento, 1973.

California Research Consultants. "Facility Sharing Among Institutions of Higher Education in California." California Coordinating Council for Higher Education. Sacramento, 1971.

The California State University and [illegible]leges. "The 1,000 Mile Campus." LosAngeles, 1972.

The College Center of the Finger Lakes. "Interinstitutional Cooperative Arrangements in Higher Education in New York State." Corning, New York, 1970.

Colorado Commission on Higher Education. "Proposals for Off-Campus Education, 1972-73" and "Recommendations Concerning Continuing Education for the System of State Colleges." (Wahing papers) Denver, 1972.

Commission for Higher Education of the State of Indiana. "The Indiana Plan for Postsecondary Education." Indianapolis, 1972.

Houle, Cyril O., The Design of Education. Jossey-Bass, Inc. San Francisco, 1972.

Institute for Educational Development. "Higher Education in Vermont: Its Resources and Needs." New York, 1972.

Maine Higher Education Planning Commission. "Higher Education Planning for Maine." Portland, 1972.

New Brunswick Higher Education Commission. "Flexibility for the 70's." New Brunswick, Canada, 1972.

New Jersey Department of Higher Education. "Thomas A. Edison College." Trenton, 1972.

New York State Education Department. "Education Beyond High School." Albany, 1972.

Smith, Robert M., Aker, George F., Kidd, J. R. (eds.) Handbook of Adult Education. The MacMillan Company. New York, 1970.

Oregon State Board of Higher Education. "Report of the Division of Continuing Education to the Oregon State Board of Higher Education Committee on Academic Affairs. Portland, 1972.

Patterson, Franklin. "The Consortia: Interinstitutional Cooperation in American Higher Education" (Draft). University of Massachusetts. Boston, 1973.

South Carolina Commission on Higher Education. "Goals for Higher Education to 1980." Columbia, 1972.

University of California. "Degree Programs for the Part-time Student: A Proposal." Berkeley, 1971.

University of Delaware Division of Continuing Education. "Annual Report 1971-1972." Newark, 1972.

BEST COPY AVAILABLE

V.D. Literature Search of Examples of Services for Special Clientele in Higher Education in Other States: Implications for Continuing and Part-time Study

Introduction

A review of the literature on part-time and continuing education in states other than Massachusetts indicates that most states advocate and are implementing an "open admissions" policy in an attempt to provide all citizens, without regard to race, religion, sex or ethnic background, access to higher education. One might assume, then, that part-time and continuing education opportunities are easily available to special clientele groups such as women, the elderly, the economically disadvantaged, and racial and ethnic minorities. It seems clear, however, that an "open admissions" policy is not sufficient to overcome the problems and barriers faced by each of these groups.

Women, particularly those who have had or still have responsibilities for home and children, may be limited by time, geographic and financial constraints; by insecurities about entering or returning to academic environments; by doubts as to their potentials and capabilities; by uncertainty about educational or career options. The elderly carry the burdens of financial constraints, physical limitations, and a culture which idolizes youth and labels the elderly useless and cumbersome. The economically disadvantaged and racial and ethnic minorities carry similar burdens - financial constraints, job and family responsibilities, and a social-political-economic history of exclusion from the mainstream of society, in particular, reinforced failure in primary and secondary education, with little access to higher education.

Educational programs and policies for these groups must address the need for freedom from the rigid structure of traditional higher education, for reassurance and counseling, for courses and options which take into account the life experiences and personal resources of such potential students. Accordingly, the following descriptions of existing programs will ignore general open admissions policies articulated by the states and will focus on those programs which actively recruit and are specifically designed to meet the needs of special clientele.

Women

Part-time and continuing education programs for women fall into two broad categories: 1) Programs created specifically for women, and 2) programs for special clientele which include women. The first category can be broken down further: a) programs which offer counseling, testing, information, referral, noncredit workshops and noncredit courses (some programs offer some, but not all, of these services) and b) those programs which, in addition to the above services, offer credit courses, most often leading to a degree or to certification.

1) Programs for Women

a) Nonacademic Programs--The University of Delaware-Division of Continuing Education, Educational Services for Women, offers credit and noncredit courses in women's studies and volunteerism and a speaker's program on "Changing Sex Roles." In addition counseling services and brochures describing educational opportunities at the University from a women's point of view are available. Program goals for women include expansion of women's studies program; expansion of educational services for women at other universities in Delaware; development of a state-wide program for teachers, parents and counselors to eliminate sex role stereotyping in school curricula and career adversement; development of a program to provide management training for women; and development of a slide presentation to illustrate educational opportunities for mature women at the University.

The Continuing Education Guidance Center at the University of North Carolina has provided a number of activities for women, including; a twelve-week seminar "The Mature Woman--Self-discovery and Wider Horizons"; "Academic Adventures" for independent reading and group discussions among women; a cooperative nursery school for children of young mothers pursuing further education; a back-to-work clinic; Voluntary Action Center for women interested in community service; special outreach to stimulate interest among mature black women; a ten-week series for divorced women; development of a women's studies program for on-campus and community women. The center is in the process of planning a program for older men and women seeking involvement in child care.

The Northern Virginia Regional Center of the University of Virginia School of Continuing Education places emphasis on development of women's self awareness and potentials. The Center offers noncredit guidance courses in which women assess their abilities and skills, and relate them to opportunities in continuing education, employment, community service and creative expression. In addition, women may enroll in noncredit courses in writing, oral communication, management of time and finances, and entering the world of work.

BEST COPY AVAILABLE

The Community Services of Continuing Education of the California State Colleges and Universities offer programs for women throughout the state. The goal of these programs is counseling to achieve personal, family and occupational development through continuing education.

In Connecticut, The Hartford College Counseling Center for Women offers the following services: counseling; testing; career information library and programs; referral to appropriate educational institutions and sources of employment; and informal workshops, seminars and lectures.

b) Academic Programs--Marymount College in California is a small private arts college. Its Encore Program is a degree completion program for women whose college education was deferred or interrupted by career or family responsibilities. The program provides counseling for program selection and encouragement; grants academic credit for previous college work; waives regular tuition the first year and charges $75 per course.

The Division of Continuing Education at the University of Colorado has created the Mini-College for Women, a program for mature women over 25. The program offers courses(up to 12 credits) without formal application; women can take academic courses while they are deciding if they want to continue for a degree. If a degree is the goal, they must apply,after twelve credits, to the University for admission. Women are also able to use the counseling and guidance facilities at the Women's Center.

Minnesota Metropolitan State College, an urban, nontraditional degree college, actively recruits women, keeps them to design programs addressed to their needs, and encourages participation in all careers and professions.

Orange County Community College in New Jersey, through its Women's Program, offers access to both credit and noncredit courses, on campus or off, during the day or in the evening. Also, recommendations to the New Jersey Department of Higher Education specifically cite the need for educational programs for women. Specifically, it was recommended that 1) efforts should be made to provide the kinds of courses women want, 2) improper admissions testing should not be a barrier to women who have been away from educational settings for some time and 3) professional counseling services should be available to women returning to school.

In New York, the Sarah Lawrence College Center for Continuing Education offers three programs for women: 1) a BA program for women who had not completed their education and have been away for a number of years, 2) Master's programs in elementary education, social work, library science. These programs were developed in cooperation with universities in the New York area, and 3) new graduate programs training women to teach at the college level or to work in the profession of medical genetics. There is some financial aid available. The Center also provides educational counseling for women living in the area, about one quarter of whom do apply to one of the Sarah Lawrence programs.

Also in New York, the College for Human Services enrolls 190 students most of whom are black and Puerto Rican women. The program combines academic courses with field work and trains its students for work in the field of human services.

The University of North Carolina Evening College provides an opportunity for registered nurses to complete up to 2 years of work toward a BS in nursing. Students can receive credit for courses taken in nonaccredited nursing programs by passing special exams offered by the School of Nursing. Scholarship funds are available to encourage participation in the program.

The University of Rhode Island, Division of University Extension has a Continuing Education Program for Women. The program provides women with the opportunity to earn a bachelor's degree from the University by attending daytime or evening classes, full-time or part-time. Bachelor's degree programs are offered in English, history, psychology, secondary education, and home economics. There are 1,000 women enrolled over the age of 22; the program seeks to serve housewives free to begin or resume their college education, women seeking new direction or increased fulfillment, and career women.

2) Programs for Special Clientele Including Women

The new nontraditional, liberal arts colleges and external degree programs all include women, especially those with family and home responsibilities, as part of their target populations. These institutions include Chicago State University--University without walls; Campus Free College; Empire State College (New York); Thomas A. Edison College (New Jersey); and the proposed Lincoln State University(Illinois) and the Wisconsin Open School. Both the University of Michigan and University of Chicago Extension School mention women (housewives) as potential students. Programs in these institutions are particularly suited to women because: 1) they are flexible in terms of time (both in scheduling of courses and in fulfilling requirements for a degree) and location; 2) programs are created around the needs and interests of inidividual women; 3) the general atmosphere is encouraging and nonthreatening; and 4) most programs give credit for life and work experiences gained outside traditional institutions of higher education.

Financial Aid

A number of institutions grant financial aid, in some form, to women returning to school. Some examples include:

1) Purdue University, Indiana-gives grants to wives of graduate students so that they may take courses; since 1968 the school has given more than $20,000 to women in this capacity.

2) University of Michigan recently awarded $18,000 in scholarship to 20 women, many of whom were part-time, between the ages of 21-43.

3) Marymount College at Loyola University charges $75 per course to mature women, instead of the usual $205 per course.

[illegible]ral Survey Chart

The following chart shows the types of programs and services offered to women in every state. The information was gathered from the "Partial List of Colleges and Universities with Continuing Education Programs or Special Educational Services Designed Primarily for Adult Women-Appendix A" in Continuing Education Programs and Services for Women,Women's Bureau, U.S. Department of Labor, 1971. Programs listed in this book are by individual institutions, but for the purposes of this paper they have been grouped together by states.

BEST COPY AVAILABLE

BEST COPY AVAILABLE

A PARTIAL SURVEY OF PART-TIME AND CONTINUING EDUCATION PROGRAMS AND SERVICES FOR WOMEN BY STATE (PUBLIC AND PRIVATE INSTITUTIONS)

State	workshops	special centers	day care	counseling	tuition assist.	part-time BA BS	women's studies/personal development	educ. courses/teacher certification	home economics	business skills	art-art related	noncredit courses	nonmatric. credit	vocational	corresp/TV courses	credit for exp./ CLEP	BS for nursing	grad. level
Alabama						X		X	X	X	X	X						
Arizona		X			X	X		X		X		X	X	X	X			
Arkansas						X												
California	X	X	X	X	X	X	X	X		X		X	X	X		X	X	
Colorado	X	X	X				X	X				X						
Connecticut		X		X		X		X				X	X	X		X	X	X
Delaware				X				X				X						
District of Col.			X	X	X	X	X					X						
Florida	X			X		X	X			X		X		X				X
Georgia						X		X		X		X		X			X	
Hawaii	X			X								X						
Idaho				X								X	X					
Illinois	X	X		X		X	X	X				X	X					
Indiana	X			X	X			X				X						X
Iowa	X	X		X	X		X					X						
Kansas	X					X	X		X		X	X	X		X			
Kentucky						X	X				X				X			
Louisiana	X						X				X			X	X			
Maine						X	X							X	X			X
Maryland	X	X	X		X	X	X		X			X	X	X	X	X		X
Massachusetts						X	X										X	
Michigan	X										X		X	X	X	X	X	X
Minnesota	X		X	X		X	X		X		X	X	X	X	X		X	X
Mississippi	X		X			X	X		X	X	X	X	X	X	X	X	X	X
Missouri					X	X	X				X				X			X
Montana							X		X									
Nebraska										X		X			X			X
New Hampshire							X		X		X			X				X
New Jersey			X				X			X		X		X	X			

BEST COPY AVAILABLE

State	workshops	special center	day care	counseling	tuition assistance	part-time BA/BS	women's studies/ personal development	educ. courses/ teacher certification	home economics	business skills	art-art related	noncredit	nonmatric. credit	vocational	corresp./TV	credit for exp./ CLEP	BS in Nursing	graduate level
New Mexico								X										
New York	X	X	X	X	X	X	X	X	X	X		X	X	X	X			X
North Carolina	X	X		X		X	X			X		X	X	X				X
North Dakota	X								X		X			X			X	
Ohio	X			X		X	X	X		X		X	X			X		
Oklahoma				X	X							X	X					X
Oregon				X						X		X	X	X				
Pennsylvania	X	X		X		X	X	X			X	X	X			X	X	
Rhode Island	X				X	X	X		X	X								
S. Carolina				X				X										X
Tennessee				X					X		X	X	X					
Texas	X			X		X				X		X	X	X				
Utah	X		X				X					X	X					
Vermont	X					X									X			
Virginia	X			X	X	X	X		X			X	X				X	
Washington	X			X			X		X			X		X				
W. Virginia												X	X					
Wisconsin	X	X	X	X	X	X	X					X	X			X		X

Elderly

Programs that do exist for the elderly seem to fall into three categories: 1) clubs - providing recreation, access to cultural events, courses in arts and crafts, sports and exercise, 2) academic programs including noncredit courses for personal enrichment, credit courses and degree programs in a variety of subject areas and 3) programs either recommended to state boards of education or currently in the planning phase. This last category is important as it indicates a growing awareness of and concern for the educational needs of the elderly.

1) Clubs:

Two specific examples of clubs for the elderly stem from continuing education programs. The first is the "Over-65 Club" of the Division of Continuing Education at the University of Delaware. Members of the club have the opportunity to order tickets to all cultural events open to the general public and to certain athletic events. The second is the Senior Citizens Program, offered through the Adult Program in Great Neck, New York. Activities in this program include a choral group, a social and political issues seminar, a physical fitness class, and a creative art workshop. In addition, the Great Neck chapter of Retired Executives and Professionals (REAP) runs workshops and seminars through the Adult Program, on a variety of topics chosen and led by members of the organization. (The Senior Citizens Program in Great Neck may be typical of other programs offered through local community-based Adult Education programs, but it was the only one noted in the available literature.)

2) Academic Programs:

Some of the institutions providing access to academic programs for the elderly do not describe the specific course content or other aspects of their programs which are tailored to the needs of senior citizens. The elderly are, however, clearly regarded as a segment of their target population. The University of Michigan Extension Service's "Learning Through Independent Study" offers opportunities for refresher courses and independent study. This program uses such multi-media institutional features as audio-tapes and records, telephone tutorials and conferences, taped simulated classroom environments and actual taped classroom discussions and lectures. Courses cover a variety of subjects; some are normally offered for credit at the University, others are specialized, nondegree, university-level courses. This program is especially suited to senior citizens who are home- or hospital-bound, bed-ridden or not easily mobile. Union College in New Jersey, through its College Unlimited program, offers noncredit college level courses designed to meet the needs of people who have been or are presently unable to participate in any level of higher education, including the elderly. Specifically, these courses may be used by those senior citizens wishing to take the College Proficiency Examination. Empire State College, part of the State University of New York, is a new, nontraditional, nonresidential liberal arts college. It was created to offer the opportunity for an undergraduate education to people who are unable to participate in traditional, residential college experiences. The flexibility structure of the program is particularly suited to older people, whose experience and knowledge will be recognized, and retired people pursuing new interests or careers. Each student creates, with an advisor, a program of study (contract) that meets his or her particular needs and interests. Study can be undertaken at home, in libraries, in community agencies or employment sites, or at local institutions of higher learning. Similarly, the University Without Walls Consortium (a group of twenty colleges and universities throughout the country) offers students with the potential for self-directed and individualized learning the opportunity to continue their education. The program draws students from a variety of backgrounds; elderly and retired persons are encouraged to take advantage of this opportunity to pursue further educational experiences. Educational services for the elderly are comprehensive in Florida. The Pinellas County public schools operate 69 adult education centers with a total enrollment of 6,500. The largest of these centers, Mirror Lake Adult Center in St. Petersburg, enrolls 1,000 students in a wide range of courses catering specifically to the needs and interests of the elderly. St. Petersburg Junior College has launched a condominium education program in the 3,000 elderly resident condominium On Top of the World. Two hundred condominium residents are enrolled in academic courses offered through the college. Another 400 take noncredit courses in local churches, banks, businesses, hospitals and centers for the deaf. The Pinellas County schools also offer courses in languages and history to condominium residents.

On the national level, the American Association of Retired Persons - National Retired Teachers Association has created the Institute of Lifetime Learning. The goal of the Institute is to promote educational programs geared to the needs of the elderly. Two large institutes in Washington, D.C. and Long Beach, California, each enroll about 1,200 elderly students and serve as experimental centers where new programs are developed. Smaller institutes, in twenty communities across the country, now enroll a total of about 1,500 students.

3) Recommended Programs:

A number of states with either limited or no educational programs for the elderly recognize the need and are in the process of planning for such programs. Master Plans and Recommendations of the State Boards of Higher Education in Maine, New York, New Jersey, Colorado, and Illinois specifically cite the elderly as clientele to be served by new programs. Both the University of North Carolina Continuing Education Guidance Center and the Wisconsin Open School are also in the process of developing special programs for elderly clientele.

BEST COPY AVAILABLE

Disadvantaged

A number of states offer programs that are geared to the educational needs of their disadvantaged citizens.

1) Degree and Academic Programs:

In Minneapolis-St. Paul, Minnesota Metropolitan State College has been created specifically for urban residents. The school allows students many options for self-directed courses of study - they can work toward a degree at their own pace and can create a program around current interests and involvements. As an urban school, Minnesota Metropolitan State recognizes the need for higher education for the disadvantaged and has made a strong commitment in this area. The College actively recruits students from Model Cities and other specific low income areas. It provides financial aid for its disadvantaged students and an environment, both academic and interpersonal, which is sympathetic and conducive to fulfilling the needs of the poor.

Similar to Minnesota Metropolitan State, the University Without Walls at Chicago State University is most interested in students who have the potential for and will benefit from individualized and self-directed learning experiences. Students are drawn from a variety of backgrounds; they are accepted on the basis of motivation and interest, rather than standardized tests and past school achievement. If a student is financially dependent on present employment, the school attempts to use that employment as a learning site, or to find the student a position which can be used this way. This kind of program meets the needs of some disadvantaged students who are not "qualified" to enter more traditional institutions, or whose time and money constraints prevent them from entering full-time residential programs.

The California State Universities and Colleges, through the "1,000-Mile Campus" have instituted an External Degree program for students of all ages who find it difficult or impossible to be part of the regular campus scene, but would like to earn an established degree from the California State Colleges and Universities. One of the major goals of the California Commission on External Degree Programs is to serve the educational needs of minority groups and the poor. Special funding is currently being sought for pilot programs in this area, and it is assumed that once the ability of pilot programs to meet the need has been established, funding will be available on a regular and comprehensive basis for such programs for all of the State's disadvantaged students.

Continuing Education programs of the New York State Education Department place emphasis and resources on programs designed to provide educational services to economically and educationally disadvantaged. Examples of such programs include:

1. development of a Multiservice Chinese Language Center in Chinatown which will assist Chinese immigrants in the acquisition of English language skills.

2. preparation courses for the high school equivalency exam for State Civil Service employees

3. programs to train disadvantaged adults for municipal positions

On the national level, the U. S. Department of Housing and Urban Development has established a University Without Walls program which serves 6,000 students in twenty states. The program was created, in part, in response to pleas of inner-city minority groups and disadvantaged for access to opportunities for higher education. Like other UWW programs, HUD's is flexible, allowing students the opportunity to learn anywhere, and giving credit for previous life and work experience. The program provides counselors to visit learning sites; accreditation for university-level training in federal, state and local agencies; special on-the-job work-study programs; individual and team teaching by instructors from a variety of sources; programmed learning and tele-teaching techniques; tutorial work done for credit in the agency environment; and more traditional learning experiences at university sites.

Also on the national level, the Campus-Free College is an independent, nonresidential learning structure which can accomodate a wide variety of learning needs and personal orientations. The college, which expects to receive degree-granting authority, actively recruits students from urban minority groups who have specific career goals.

2) Vocational training programs:

New York has extensive vocational training programs specifically designed for minority groups and disadvantaged. Manpower Training Programs provide the following for hardcore unemployed and economically disadvantaged:

1. Public Service Careers: secures permanent positions in public service agencies

2. Job Opportunities in the Business Sector: encourages private industries and businesses to hire and train unemployed and underemployed

3. Operation Mainstream: provides counseling and basic education and work experience in community betterment projects, mainly in rural areas

4. Neighborhood Youth Corps: provides job training for high school youth

5. Concentrated Employment Program: provides coordinated manpower and supportive services

The Urban Center in Brooklyn, under the auspices of the State University of New York, was created to provide disadvantaged and out-of-school youth

BEST COPY AVAILABLE

and adults a chance to get all the free vocational training and academic experience they need or desire. Almost all students are black and latino. The programs offered by the Center maintain a high fidelity to the job market, so that graduates will be successful in finding employment. Programs in apparel processing, business machine repair, keypunch, drafting, office skills are offered. Ancillary services such as General Equivalency Diploma preparation, English as a Second Language, Civil Service and Practical Nurse License Exam are also provided. A high priority is placed on counseling for the students before they enter the program, during their training, and after graduation.

3) Recommended Programs:

A few states are in the process of developing educational programs for their disadvantaged population, as recommended to State Boards of Higher Education. Maine, for example, has stated as its goals, an enrollment of 25% low income students and increased financial aid to part-time students. Recommendations for Colorado have centered on the disadvantaged. Proposed programs include outreach, particularly in isolated rural areas, occupational education, and nontraditional extension, correspondence and evening courses. The proposed Wisconsin Open School and Lincoln State University (Illinois) would both recruit disadvantaged and minority students and high school and college dropouts.

Other Special Clientele

In some states, special attention has been focused on other special clientele groups, mainly those people in correctional institutions and hospitals. Maine, in keeping with its stated goal of involving a true cross-section of its population in higher education, is planning for delivery of educational services to new audiences in prisons, nursing homes and hospitals. Similarly, the proposed Open School in Wisconsin and Lincoln State University in Illinois would seek to serve potential students in correctional and health care institutions, and those confined by illness or disability to their homes. In California, Stanislaus State College and other state colleges are beginning to offer continuing education courses to prisoners who are ending their terms. The focus of these programs is helping inmates cope with the society they will enter when they are released.

Two recommendations made to the Colorado Commission on Higher Education were 1) development of course materials and the provision of instruction suited to the qualification and needs of the prison population and 2) development of a Pilot Program at the Penitentiary that would place inmates in social production careers with job training and counseling at the institution, and would provide continuing education for ex-prisoners after release. The New Jersey Department of Higher Education, in its Planning Document for An External Degree Program is concerned with meeting the educational needs of prison inmates and patients in health care and hospital facilities. The New Jersey Prison Program is a cooperative arrangement between New Jersey penal institutions and junior and four-year colleges whereby prisoners can undertake work toward an associate or bachelor of arts degree.

In New York, recommendations listed in the State Education Department Annual Report include state aid for libraries to serve health, mental health, narcotics addiction and correctional institutions and funds for vocational training for persons in mental health facilities.

Conclusion

From a review of the literature, it appears that educators and state administrators throughout the country recognize the need for greatly expanded educational opportunities and services for all special clientele. Some states are moving more quickly in that direction than others, as cited in the above sections. Others clearly recognize the need and espouse the commitment but lag behind in following through with actual services. In some states, programs have been created at the local community level through either the public school districts or private institutions.

It seems clear, however, that if comprehensive educational services are to be provided to all citizens who want them, in every state, a serious commitment must be made by each state to create and allocate funds, research and teaching resources, and administrative and physical facilities for this purpose.

BEST COPY AVAILABLE

V.E. Part-time Faculty Status and Unionization

The movement toward unionization of part-time faculty is barely perceptible in the total activity of unionization and collective bargaining in higher education. The reasons range from the obvious one of how much will a part-time person be worth and committed to union activity compared to a full-time faculty member whose entire life and livelihood depend upon conditions of work, to the subtleties of defining and weighting part-time personnels' role in the life of a higher education community.

The view of the National Education Association is to watch with interest developments at such institutions as the City University of New York where two separate bargaining units representing part-time nontenured instructors and tenured full-time faculty are now working as one unit in developing standards and procedures for establishing working conditions. The American Association of University Professors has to date been on record as generally opposed to inclusion of part-time faculty in collective bargaining campus units, at least until the National Labor Relations Board establishes uniform standards for part-time definition and function. In argument with the AAUP, for example, at New York University and Fairleigh Dickinson University, the American Federation of Teachers has stood for the inclusion of part-time faculty in collective bargaining units.

The position of the National Labor Relations Board has been to insist on retaining flexibility in defining when part-time faculty should, or to what extent they should, be included in campus bargaining units, following a policy they have also maintained for such categories as supervisors, department chairmen, and librarians. The NLRB has insisted that individual institutional policies and personnel practices necessitate ruling on an individual institutional basis, and that until enough experience has been obtained in a variety of institutions, a general ruling on part-time faculty would be premature. Some of the Board's early, and thus possibly precedent setting, rulings are, however, significant for part-time or adjunct faculty personnel.

In a 1971 ruling for the C.W. Post Center of Long Island University, and acting upon a petition filed by the United Federation of College Teachers, AFT, the Board ruled that the bargaining unit of professional employees at the institution include adjunct professors, associate professors, assistant professors and lecturers, stating that "they are regular part-time professional employees whose qualifications and chief function, teaching, are identical with those of the full-time faculty."[1] The NLRB further noted that while adjunct faculty may not achieve tenure, participate in the fringe benefits of full-time faculty, are appointed annually according to the availability of work, and may hold positions at other schools, they participate in policy deliberations by virtue of attending staff meetings where they can be heard, and that while they did not have the right to vote, they had on occasion voted. The Board thus concluded that "under well settled principles, neither difference in benefits, high ratio of part-time to full-time employees nor additional employment elsewhere militates against their inclusion."[2]

In subsequent decisions at Fordham University and the University of Detroit, the Board ruled that part-time faculty should be included with full-time faculty in the bargaining unit, citing an earlier decision for the University of New Haven. In the Detroit ruling, the Board ruled that part-time faculty were found to have considerable community of interest with the full-time faculty and so should be included with the latter in the bargaining unit.

These decisions, while favorable to part-time personnel, raise questions which, as noted above, have not allowed the NLRB to establish blanket definitions and regulations regarding part-time status in bargaining procedures. Thus, in the Board's Manhattan decision, the Board described part-time faculty as "regularly teaching a minimum of one-quarter of the normal teaching load as eligible regular part-time faculty. The Board pointed out that this decision established only that adjunct professors had sufficient community of interest to be included in a unit with full-time faculty, and that it did not relate to the eligibility of particular adjunct professors."[3] This decision left open the question as to when a particular faculty group has sufficient community of interest with full-time personnel to allow them to be included in a bargaining unit.

An essential question in these decisions is what determines "community of interest" as well as the issue of definition of part-time inasmuch as the Board's ruling does not base such definition solely on number of hours taught. Arguments before the Board concerning the roles of part-time and full-time faculty in bargaining unit participation and voting at New York University and Fairleigh Dickinson University set forth some of the dimensions of the question.

First, inclusion of part-time faculty in a bargaining unit might be determined by assessing the extent to which they are "regular" part-time faculty. Such extent can be determined in looking at the role of part-time faculty members in developing and implementing tenure policy. It might be established by noting how much, if at all, part-time faculty have any role in the development of curriculum. Perhaps most important, part-time faculty participation in governance is a dimension to be examined. Thus, in the above noted Detroit situation, it is noteworthy that two part-time faculty were elected to the University of Detroit's faculty senate. As will be indicated below, several higher education institutions have made changes or additions to institutional policy in an effort to "regularize" part-time faculty.

Regularizing part-time faculty leads, then, to the issue of extent to which they share a common bond with full-time personnel in their work in and obligations to the university--i.e. a community of interest. Community of interest has been portrayed by Ed Robreno of the Massachusetts Teachers Association as including common physical location, common duties, common employer and common educational background, and no less than a one-quarter time teaching commitment. Matthew Finkin, counsel for the

BEST COPY AVAILABLE

BEST COPY AVAILABLE

AAUP in arguing before the NLRB regarding New York University and Fairleigh Dickinson notes other criteria for determining community of interest some of the subtleties involved.

A first criterion is similarity of working conditions such as benefits, the latter often being available to full-time faculty and not to part-time, or at least to a considerably lesser extent. A second criterion is "identity of work function."[4] Here Finkin takes exception to a Board statement that based on its University of New Haven ruling the work performed by part-time faculty is the same as work performed by full-time faculty. He notes that in assessing the work of full-time faculty, particularly where promotion and tenure are concerned, such matters as publication of books and articles, research, participation in committees and other aspects of university citizenship such as student advising are not incorporated in evaluating the work of part-time faculty. He adds that full-time faculty are paid to do more than meet classes and the other limited services performed by part-time faculty members.[5]

A third criterion previously noted is the extent to which faculty participate in the governance of the institution. Thus, it is argued that the absence of the voice of part-time faculty members in such matters as selection of department chairmen bears on their sharing a common interest with full-time faculty members in the life of a department. In short, Finkin argues, one has to determine "whether the part-timers have a substantial, continuing interest in the terms and conditions of their employment" and "if they do have such an interest, do they share it in a community with the full-time faculty."[6]

Trends in regularizing part-time faculty and thus creating a basis for community of interest with full-time faculty members may be seen in a variety of colleges and universities across the country. An interesting categorization of part-time faculty into "moonlighters," "twilighters," and "sunlighters" has been set forth by Wesleyan University. (see chart below). "Moonlighters" are persons employed elsewhere who merely teach one course. They receive no fringe benefits, tenure, or sabbatical accrual. They have no advisees or committee work and do not have a departmental vote. "Twilighters" are persons not otherwise employed but whom the department does not choose to give a regular part-time faculty position. They have no departmental vote but do get prorated fringe benefits. "Sunlighters" are regular faculty appointments who are like full-time members in that they have pro-rated fringe benefits, committee assignments, advisees, tenure, and sabbatical accrual. They differ from full-time personnel in the amount of time they work, but may negotiate for full-time status.

Yale University made changes last year in university procedures for part-time faculty, particularly with regard to tenure. Where formerly persons holding part-time appointments were not considered eligible for tenure, some part-time faculty members may now be considered for tenure in one of the university faculties. Part-time is defined in such a way that it means not only part-time teaching but also refers to research and other reponsibilities such as committee work, with the part-time faculty member devoting half the usual amount of time to these tasks. The new Yale regulations also stipulate that any part-time member holding term appointments may extend their existing term in rank (instructor, assistant or associate professor) to the equivalent of a normal full-time term of appointment Other provisions indicate such benefits as summer compensation, travel grants, retirement plans and health plans similar to full-time faculty though adjusted according to the proportion of full-time teaching service.

The amended by-laws of Colgate University include part-time faculty classified as professor (part-time), associate professor (part-time), assistant professor (part-time), and instructor (part-time) as regular voting members of the faculty. While indicating that part-time service does not count as a probationary period toward tenure, the by-laws state that tenure may be granted at the discretion of the President and with the approval of the Board of Trustees. Colgate distinguishes two types of part-time personnel: 1) those whose teaching load is at least one-half the full-time load over the full academic year with responsibility for teaching, scholarly research and service to the University community; and 2) those who teach but carry no further responsibilities beyond that of delivering their courses and who accordingly only have the rank of lecturer and no voting privileges.

The University of Wisconsin Senate also last year approved allowing the titles of assistant, associate, and full professor in the appointing of part-time faculty members, noting that such members are eligible for review for tenure the same as their full-time equivalents in rank. Part-time service as used above is delineated as not less than half-time when counting as the probationary period for tenure, and that such probationary period cannot exceed twelve calendar years. Part-time faculty whose appointments are at least half-time are eligible to hold elective offices as senator or committee members.

Part-time faculty at Cornell University may hold the titles of adjunct assistant professor, adjunct associate professor, and adjunct professor. The latter two may be reappointed for renewable terms not in excess of five years, and three years in the case of adjunct assistant professors. Adjunct faculty do not have voting privileges in the university faculty but may be granted such privileges in a particular school or college of the University.

The above are undoubtedly but a small sample of trends to regularize part-time faculty. The causes for these trends since roughly 1970 may in part be attributed to the rise of unionization in higher education. and the thrust of the women's movement. Women in academic life have traditionally held those ranks generally conceived to be adjunct or part-time; i.e. lecturer, visiting lecturer, instructor. A study of the American Historical Association in 1972 noted that the first appointment following the Ph.D. generally placed 32 percent of women in these ranks compared to five percent men.[7]

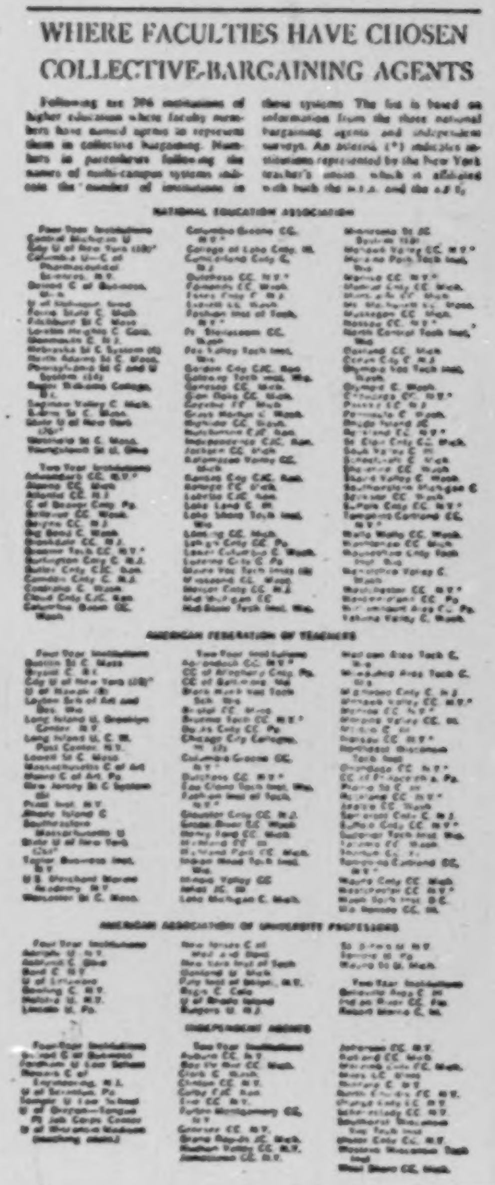
A recent development at Columbia University is illustrative of the impact of women. Where a code of academic freedom and tenure was originally established for part-time tenure for women, it was subsequently amended to apply to men and women part-time faculty. Part-time faculty were defined as eligible for promotion through all ranks to tenure and a full professorship on a part-time basis.

A conclusion that can be drawn from trends to regularize part-time faculty is that regularization may compel unionization of these members. With regularization can come that community of interest with full-time faculty which enables part-time faculty to be considered eligible to join them in the bargaining units of institutions.

The criterion of community of interest poses another possible conclusion where unionization of continuing education faculty are concerned. Current unionization efforts on behalf of part-time faculty indicate that these efforts have mainly been directed at personnel teaching in regular day-time or equivalent programs. Such concentration could be due to the fact that continuing education personnel are not perceived as likely to share in the life of the institution, and thus should not vote as part of a bargaining unit.

On the other hand, the separation of continuing education from the institution--for example, a school or college of continuing education--could lead to continuing education personnel establishing their own bargaining unit. Precedent for such action does exist in an NLRB ruling concerning the Fordham University Law School. The NLRB determined that the law school faculty constituted "an identifiable group of employees whose separate community of interests is not irrevocably submerged in the broader community of interest which they share with other faculty members."[8] Given the prevalent pattern of self support in continuing education programs and a rather distinct clientele served by continuing education programs, a case might be made for describing continuing education personnel as a separate and distinct community within a university. Thus, creating exclusivity of faculty personnel, in contrast to the regularization noted above, may provide another force for unionization in the future. The potential for growth of continuing education programs may provide pressures for energizing such a force.

The consequence of unionization, both adverse and beneficial, on the continuing education "system" in Massachusetts will be elaborated elsewhere in this study.



WHERE FACULTIES HAVE CHOSEN COLLECTIVE-BARGAINING AGENTS

NATIONAL EDUCATION ASSOCIATION

AMERICAN FEDERATION OF TEACHERS

AMERICAN ASSOCIATION OF UNIVERSITY PROFESSORS

INDEPENDENT AGENTS

From The Chronicle of Higher Education, May 10, 1971.

BEST COPY AVAILABLE

PART-TIME FACULTY

Wesleyan University

	Moonlighters	Twilighters	Sunlighters
I. Benefits			
1. Salary	1/6 base of rank per course	1/6 base of rank per course	1/5 of full salary (acc. to rank & service) per course
2. TIAA/CREF	0	Yes, if teaching at least one course each term with expectation of renewal	Yes
3. Insurance	0		Yes
4. Grants in Support of Scholarship	0	Yes, prorated	Yes, prorated
5. Sabbatical accrual	0	Yes, prorated	Yes, prorated
6. Tenure decision accrual	0	0	Yes: not later than 17th term.
7. Length of appointment	One term or one year	One term or one year	Standard: initial app't of 4 yrs., etc.
8. Load	One course per term	One or two courses per term	At least half-time
9. Title	Visiting______	Visiting______	Standard
II. Duties			
1. Department membership and vote	0	0	Yes
2. Committee eligibility	0	0	Yes
3. Advising	0	0	Yes

BEST COPY AVAILABLE

FOOTNOTES

1. "Negotiations Research Digest," National Education Association. June, 1971. p. 12.
2. Ibid., p. 12.
3. Ibid., March, 1973, p. 9.
4. Report of Proceedings before the National Labor Relations Board, New York University Chapter, American Association of University Professors, p. 15.
5. Ibid., pp. 15-16.
6. Ibid., p. 19.
7. Tobias, Sheila, and Rumbarger, Margaret. "Full-Status Part-Time Faculty: Problems and Possibilities." Paper presented to the American Council on Education. October 6, 1972.
8. Op. cit. "Negotiations Research Digest." December, 1971, p. 12.

BIBLIOGRAPHY

Bain, Trevor. "Precarious Professors: New Patterns of Representation, A Comment," and Garbarino, Joseph W., "Reply to Professor Bain." Industrial Relations, May 1971.

Belcher, A. Lee. "The NLRB Ruling: How It Affects Campus Administration," College and University Business. August, 1970.

Finkin, Mathew W. "Collective Bargaining and University Government." AAUP Bulletin. June, 1971.

Garbarino, Joseph W. "Precarious Professors: New Patterns of Representation," Industrial Relations. February, 1971.

Lieberman, Myron. "Professors, Unite!" Harper's. October, 1971.

National Education Association. "Negotiations Research Digest." December, 1971, Vol. 5, #4, April, 1971, Vol. 4, #8, June, 1971, Vol. 4, #10, March, 1973, Vol. 6, #7.

Schulman, Carol, H. Collective Bargaining on Campus. American Association. American Association For Higher Education. March, 1972.

Scully, Malcolm G. and Sievert, William A. "Collective Bargaining Gains Converts Among Teachers; Three National Organizations Vie to Represent Faculties." The Chronicle of Higher Education. May 10, 1971.

Tobias, Sheila and Rumbarger, Margaret. "Full-Status Part-Time Faculty: Problems and Possibilities." Paper presented to the American Council on Education. October, 1972.

Tyler, Gus. "The Faculty Joins the Proletariat. Change. Winter 1971-1972.

V.F. Federal Role in Continuing Education

Some 208 programs have been identified by the National Advisory
Council on Extension and Continuing Education as having federal support
and being involved with the provision of higher education, usually on
a part-time basis, for adults. The Council further defines such pro-
grams of higher education as those which use resources of higher
education to support community efforts to alleviate social problems
and those which allow adults to return to full-time study following
a break in the regular education process.

Expenditures for these programs total over $8 billion
The Council identifies about $2.6 billion as being very directly rela-
ted to continuing education inasmuch as many programs are only in part
concerned with continuing education and do not account separately for
continuing education as a separate and distinct accounting category.
The fact that many continuing education activities are often part of
a larger program with objectives other than those related strictly
to continuing education makes the coordination and special manage-
ment of continuing education programs difficult. For example, most
of the $376 million expenditure for Project Headstart is aimed at
improving the preschool education of children from poverty back-
grounds, but about $18 million are used to establish and administer
continuing education programs for staffing child development centers.
Included in this effort are the enrollment of some 9600 persons for
degree credit in over 400 colleges and universities. This example
appears to illustrate a theme that runs through many federal programs.
Specifically, continuing education efforts are often a part of larger
programs whose main emphasis is not continuing education. Thus, co-
ordination of continuing education programs with similar goals is
made difficult because they are individually submerged within larger
federal program efforts of seemingly different purposes.

Within each of the above noted 208 programs, a variety of pur-
poses exists. Fifty-one programs are devoted to improving the compe-
tencies of teachers and school administrators in such areas as adult
education, teaching the physically handicapped, training teacher
trainers, training teachers of migrant children, training vocational
educators, and preparing school librarians. Fifty-nine programs are
devoted to improving health services or providing continuing educa-
tion opportunities to health personnel including advanced training
in research for nurses, continuing education for physicians in
various specialities, and training public health personnel in con-
trol of communicable diseases. The goals of nine programs classified
as vocational included the preparation of unemployed scientists and
engineers for other fields and training museum personnel as educators
of the public. Other programs include the Public Broadcasting Corpora-
tion programming, National Science Foundation education programs, vari-
ous health and physical fitness programs, and programs sponsored by
the National Foundation on the Arts and Humanities. Finally, veterans
education, specifically the GI Bill, and community service programs
such as those under Title I of the Higher Education Acts comprise a
sizeable piece of federally sponsored higher adult education efforts
(See Table 1).

Some of the characteristics of federally supported programs of
extension, continuing education, and community service summarized by
Council studies indicate both problems and patterns that affect both
programs and the higher education institutions where programs are
housed. As previously noted Congress has funded many programs as
separate entities through a variety of agencies and under over 100
separate laws, many such programs having similar purposes (See Table
2). Coordination, planning, and effective use of university resources
is thus made difficult. The life span of much of the existing program
legislation is five years or less, often making long-range planning and
achievement of goals difficult due to uncertainty about the continued
existence of these programs. Such uncertainty is particularly critical
where federal programs involve higher education institutions in community
service efforts in such areas as crime, poverty, drug abuse, and environ-
mental decay. These efforts have created changes in the traditional role
of higher education institutions while at the same time creating lack
of commitment to these new community service functions due to the preca-
rious nature of future funding.

Many of the federally created programs in extension and continuing
education were created in response to a social problem or national
challenge starting with the launching of Sputnik to later programs
dealing with urban decay, racial tensions, unemployment, and other
social problems previously noted. Legislation creating such programs
has come mainly from Congress. The result is that federal administrators
responsible for carrying out these programs have often not been responsible
for their conception and have in some cases testified against the
programs for which they became eventually responsible. Given such
tentative and sometimes unenthusiastic administrative guidance plus
the uncertain expiration date of legislation, the central administrative
base for programs is often less than stable. Such instability causes
educational institutions to respond to federal programs--for instance,
those in community service--in a tentative manner or with constant
juggling of resources to continue work begun under federal impetus.
A result has been that "rather than serving to consolidate, strengthen,
and focus university continuing education resources, the effect more
often has been to produce internal competition for funds and programs
and to disperse activity so broadly that a concerted universitywide
continuing education effort became administratively difficult if not
impossible."[1]

The National Advisory Council on Extension and Continuing Educa-
tion has noted that continuing education efforts at the university
level are made further difficult by virtue of a lack of clear federal
policy or responsive federal focus for continuing education programs
and interest. The Council notes that continuing education adminis-
trators are not as actively engaged as other departmental faculties
in seeking funds from federal agencies, or they are not aware of
possible programs that may serve their purposes. One reason noted

---

[1] A Measure of Success, Federal Support for Continuing Education. National Advisory Council on Extension and Continuing Education. March, 1973, p. 25.

BEST COPY AVAILABLE

for this situation is the fact that continuing education, unlike other departments or units of a university, has no particular opposite within the federal bureaucracy such as HEW or NIH for medical school and health programs or the Department of Justice for law schools. Similarly, teacher training programs may look to the Office of Education's Bureau of Educational Personnel Development, and science programs may be assisted by the National Science Foundation. The result of having no federal counterpart or focus has often served to place continuing education activities in low esteem by university administrators.

Table 1.—Program purpose

Program purpose	Number of programs	Federal program expenditures	Continuing education expenditures
1. Educational personnel development	51	$2,572,969,000	$200,471,000
2. Public health (personnel development and community service)	59	613,690,000	225,317,000
3. Vocational education	9	48,057,000	73,202,000
4. Miscellaneous education for the general public	23	35,051,000	21,134,000
5. Veterans education	3	1,906,606,000	1,367,500,000
6. Community service:			
a. Environmental problems	12	36,301,000	20,201,000
b. Problems of the disadvantaged	21	1,219,112,000	103,837,000
c. Crime and delinquency	12	484,651,000	126,470,000
d. Improvement of State and local government	5	1,121,802,000	124,613,000
e. Multipurpose	3	10,500,000	10,500,000
f. Other	2	16,021,000	13,121,000
7. Agricultural production and rural life	5	161,091,000	161,091,000
8. Business and industry	3	22,736,000	22,736,000
Total	208	8,279,282,000	2,593,196,000

From 7th Annual Report, National Advisory Council on Extension and Continuing Education, p. 15

Table 2.—Programs with extension, continuing education and community service features

Agency	Number of programs[1]	Total program expenditures
Department of Health, Education, and Welfare	100	$3,303,910,000
National Science Foundation	15	105,631,000
Atomic Energy Commission	13	2,303,000
National Foundation on the Arts and the Humanities	11	20,431,000
Department of Justice	11	471,651,000
Environmental Protection Agency	9	21,620,000
Department of the Interior	7	20,479,000
Department of Defense	5	5,874,000
Department of Housing and Urban Development	4	309,201,000
President's Council on Physical Fitness and Sports	4	50,000
Veterans Administration	4	2,021,[illegible]
Office of Economic Opportunity	3	202,100,000
Department of the Treasury	3	312,000
Smithsonian Institution	3	1,056,000
Department of Labor	3	1,455,652,000
Civil Service Commission	2	13,918,000
Small Business Administration	2	10,871,000
Department of Transportation	2	3,130,000
Department of Commerce	2	60,073,000
Tennessee Valley Authority	2	9,213,000
National Aeronautics and Space Administration	1	725,000
National Gallery of Art	1	120,000
Department of Agriculture	1	149,267,000
Total	208[1]	8,279,[illegible],000

From 7th Annual Report, National Advisory Council on Extension and Continuing Education, p. 16

The impact of federal policy and support for continuing education appears, therefore, to neither provide security for programs or assist in giving continuing education missions a position of importance in the university structure. Lack of coordination and distinct prominence at the federal level creates similar conditions at the state and University levels. The submersion of continuing education efforts in larger federal programs serves to make them less visible and provides no federal focus for continuing education interests.

The establishment of state postsecondary commissions as required by section 1202 of the Educational Amendments of 1972 may provide better coordination and planning of continuing education at the state level and a needed focus for continuing education interests. The current situation of federal funds granted on a demonstration or short term basis would appear to reinforce continuing education's tradition of having to go it alone, subject to the whims of the marketplace.

BEST COPY AVAILABLE

BEST COPY AVAILABLE

APPENDIX A

INSTITUTIONS INCLUDED IN THE STUDY

All institutions were requested to supply information about programs and students; to insure completeness and accuracy of the data, several follow-up efforts were made including telephone or on-site interviews in some cases. Those institutions which responded are included in the analysis. The list of these institutions is presented by geographic service area.

I. Massachusetts Institutions by Service Area

A. SPRINGFIELD AREA

1. Degree-Granting Institutions

American International College
Springfield

Bay Path Junior College
Longmeadow

College of Our Lady of the Elms
Chicopee

Holyoke Community College
Holyoke

Mount Holyoke College
South Hadley

Springfield College
Springfield

Springfield Technical Community
College
Springfield

Western New England College
Springfield

Westfield State College
Westfield

2. Proprietary and Independent Postsecondary Institutions

Barnes Aviation
Westfield

Brom's Barber School
Springfield

Kay-Harney Hair Design Academy
Springfield

St. Hyacinth College and Seminary
Granby

Springfield Hospital Medical
Springfield

United Technical School
Springfield

Vocational Education and Training
Corporation
Westfield

3. Adult Education Programs

Easthampton High School
Easthampton

South Hadley High School
South Hadley

Southwick High School
Southwick

Springfield Public Schools
Springfield

4. Vocational Technical Schools

Holyoke Trade High School
Holyoke

Smith's Vocational and Agricultural
High School
Northampton

Springfield Trade High School
Springfield

B. PITTSFIELD/NORTH ADAMS AREA

1. Degree-Granting Institutions

Berkshire Community College
Pittsfield

North Adams State College
North Adams

Williams College
Williamstown

2. Proprietary and Independent Postsecondary Institutions

Berkshire Aviation Enterprises,
Inc.
Great Barrington

Berkshire Christian College
Lenox

Simon's Rock
Great Barrington

3. Adult Education Programs

Lee High School
Lee

Lenox Public Schools
Lenox

Monument Mt. Regional High
High School
Great Barrington

Wahconah Regional High School
Dalton

4. Vocational Technical Institutions

Charles H. McCann Regional
Technical Institute
North Adams

Pittsfield Vocational High School
Pittsfield

C. AMHERST/NORTHAMPTON AREA

1. Degree-Granting Institutions

Amherst College
Amherst

Greenfield Community College
Greenfield

Hampshire College
Amherst

Smith College
Northampton

University of Massachusetts
Amherst

2. Proprietary and Independent Postsecondary Institutions

City Aviation
Northampton

Northampton Junior College
Northampton

3. Adult Education Programs

Amherst-Pelham Regional School
District
Amherst

Greenfield Public Schools
Greenfield

BEST COPY AVAILABLE

D. WORCESTER AREA

1. Degree-Granting Institutions

Anna Maria College for
Women
Paxton

Assumption College
Worcester

Becker Junior College
Worcester

Clark University
Worcester

College of the Holy Cross
Worcester

Leicester Junior College
Leicester

Quinsigamond Community College
Worcester

Worcester Junior College
Worcester

Worcester Polytechnic Institute
Worcester

Worcester State College
Worcester

2. Proprietary and Independent Postsecondary Institutions

Brom's Academy of Hairstyling
Worcester

Electronic Computer Programming
Worcester

Leo's Beauty Institute
Worcester

New England School of Accounting
Worcester

Salter Secretarial School
Worcester

Hiller Airport Flying Service
Worcester

Hopedale Airways, Inc.
Hopedale

Sterling Aviation
Sterling

Vitek, Inc. (Air Worcester)
Worcester

Worcester Art Museum School
Worcester

3. Adult Education Programs

Bartlett High School
Webster

Northbridge Jr.-Sr. High School
Northbridge

Sutton Jr.-Sr. High School
Sutton

Tantasqua Regional High School
Boylston

Worcester Public Schools
Worcester

4. Vocational Technical Schools

Worcester David Hale Fanning
Trade High School
Worcester

Worcester Industrial Technical
Institute
Worcester

E. FITCHBURG/GARDNER AREA

1. Degree-Granting Institutions

Fitchburg State College
Fitchburg

Mt. Wachusett Community College
Gardner

2. Proprietary and Independent Postsecondary Institutions

Henri's School of Hair Design
Fitchburg

Hunter Aviation Corporation
Fitchburg

Regina Coeli College
Fitchburg

3. Adult Education Programs

Leominster Public Schools
Leominster

Lunenberg Public Schools
Lunenberg

4. Vocational Technical Schools

Leominster Vocational High School
Leominster

Montachusett Regional Technical
Institute
Fitchburg

F. FRAMINGHAM AREA

1. Degree-Granting Institutions

Framingham State College
Framingham

Northeastern University
Framingham Branches

University of Massachusetts
Amherst

Concord-Carlisle High School
Concord

2. Proprietary and Independent Postsecondary Institutions

Don's Flying Service
Marlboro

Kenneth Hair Design
Framingham

Opticians' School of Framingham
Framingham

3. Adult Education Programs

Concord-Carlisle Regional
School District
Concord

Holliston Public Schools
Holliston

Hopkinton Schools
Hopkinton

Lincoln-Sudbury High School
Sudbury

Maynard School Department
Maynard

Milford Schools
Milford

Natick High School
Natick

BEST COPY AVAILABLE

4. Vocational Technical Schools

Marlboro Vocational High School
Marlboro

G. LYNN/SALEM AREA

1. Degree-Granting Institutions

Endicott Junior College
Beverly

Gordon College
Wenham

Northeastern University
Lynn Branch

North Shore Community College
Beverly

Salem State College
Salem

2. Proprietary and Independent Postsecondary Institutions

Continental Beauty Academy
Lynn

East Coast Tractor Trailer
School
Danvers

Gordon-Conwell Theological
Seminary
South Hamilton

Mansfield Beauty Academy
Mansfield

Marian Court Secretarial School
Swampscott

New England Flyers Air Service
Beverly

North Atlantic Airways
Beverly

TAD Institute
Beverly

3. Adult Education Programs

Danvers High School
Danvers

Lynn Evening School
Lynn

Stoneham Public Schools
Stoneham

Swampscott Public Schools
Swampscott

4. Vocational Technical Schools

Northeast Metropolitan Regional
Technical Institute
Wakefield

H. ANDOVER/LOWELL AREA

1. Degree-Granting Institutions

Lowell State College
Lowell

Lowell Technological Institute
Lowell

Merrimack College
North Andover

Northeastern University
Haverhill Branch

Northeastern University
Nashua, N. H. Branch

Northern Essex Community College
Haverhill

2. Proprietary and Independent Postsecondary Institutions

Andover Institute of Business
Andover

B.B. Airways, Inc.
East Pepperell

Dutton Flying Service
Haverhill

Halo Hospital
Haverhill

M. Fazio Institute of Beauty
Culture
Lawrence

Solari School of Hair Design
Lowell

Tew Mac Aviation
Tewksbury

3. Adult Education Programs

Chelmsford High School
Chelmsford

City of Lawrence
Lawrence

Masconomet Regional High School
Topsfield

North Middle School and Westford
Academy
Westford

Tewksbury School System
Tewksbury

Tyngsboro Public Schools
Tyngsboro

4. Vocational Technical Schools

Essex Agricultural and Technical
Institute
Hathorne

Greater Lawrence Regional Technical
Institute
Andover

Lowell Girls Vocational High
School
Lowell

BEST COPY AVAILABLE

I. BURLINGTON/BEDFORD AREA

1. Degree-Granting Institutions

Fitchburg State College
Bedford-Marist Extension Center
Bedford

Middlesex Community College
Bedford

Northeastern University
Burlington Branch

2. Proprietary and Independent Postsecondary Institutions

Comerford Flight School
Bedford

Control Data Institute
Burlington

Executive Flyers Aviation
Corporation
Bedford

Hathaway School of Conservation
Education
Lincoln

Honeywell Institute of Information
Sciences
Burlington

Technical Aero Service
Bedford

3. Adult Education Programs

Wilmington High School
Wilmington

J. BROCKTON AREA

1. Degree-Granting Institutions

Bridgewater State College
Bridgewater

Dean Junior College
Franklin

Massasoit Community College
Brockton

Stonehill College
North Easton

Wheaton College
Norton

2. Proprietary and Independent Postsecondary Institutions

Brockton Academy of Beauty
Culture
Brockton

Chandler School of Welding
North Pembroke

Hall Institute of Real Estate
Norwell

King Aviation Service
East Taunton

Marshfield Aviation
Marshfield

Old Colony Trade School
Brockton

South Shore Conservatory of
Music
Hingham

3. Adult Education Programs

Braintree School Department
Braintree

Canton Public Schools
Canton

East Bridgewater High School
East Bridgewater

Foxborough Public Schools
Foxborough

Hanover Evening School
Hanover

Hingham Public Schools
Hingham

Norwell Public Schools
Norwell

Scituate High School
Scituate

Weymouth Evening School
Weymouth

4. Vocational Technical Schools

Southeastern Regional Technical
Institute
South Easton

Taunton Vocational High School
Taunton

K. FALL RIVER/NEW BEDFORD AREA

1. Degree-Granting Institutions

Bristol Community College
Bristol

Southeastern Massachusetts
University
North Dartmouth

2. Proprietary and Independent Postsecondary Institutions

Diman Regional Technical
Institute
Fall River

Fall River Academy of Beauty
Culture
Fall River

Fall River Beauty Academy
Fall River

New Bedford Beauty Academy
New Bedford

Swain School of Design
New Bedford

Taunton Beauty Academy
Taunton

3. Adult Education Programs

Acushnet Public Schools
Acushnet

Apponequet Public Schools
Freetown

4. Vocational Technical Schools

Diman Regional Technical
Institute
Fall River

BEST COPY AVAILABLE

L. FALMOUTH/BARNSTABLE AREA

1. Degree-Granting Institutions

Bridgewater State College
Hyannis Branch

Cape Cod Community College
West Barnstable

Massachusetts Maritime Academy
Buzzards Bay

2. Proprietary and Independent Postsecondary Institutions

Hyannis Aviation
Hyannis

Wills Flying Service
East Falmouth

3. Vocational Technical Schools

Upper Cape Cod Regional Vocational
Technical High School
Bourne

M. BOSTON AREA

1. Degree-Granting Institutions

Aquinas Junior College
Newton and Milton

Babson College
Wellesley

Bentley College
Waltham

Boston College
Boston

Boston State College
Boston

Boston University
Boston

Brandeis University
Waltham

Curry College
Milton

Emmanuel College
Boston

Emerson College
Boston

Fitchburg State College
Boston Area Branch Campuses

Garland Junior College
Boston

Grahm Junior College
Boston

Harvard University
Cambridge

Hebrew College
Brookline

Lasell Junior College
Newton

Lesley College
Cambridge

Mass. Bay Community College
Watertown

Mass. College of Art
Boston

Middlesex Community College
A.B.C.D. Extension Center

Middlesex Community College

Mt. Ida Junior College
Newton

Newbury Junior College
Boston

New England Conservatory of Music
Boston

Newton Junior College
Newton

Nichols College of Business Administration
Dudley

Northeastern University
Boston

Pine Manor Junior College
Chestnut Hill

Quincy Junior College
Quincy

Radcliffe College
Cambridge

Regis College
Weston

Simmons College
Boston

Suffolk University
Boston

Tufts University
Medford

University of Massachusetts
Boston

Wellesley College
Wellesley

Wentworth Institute
Boston

Wheelock College
Boston

BEST COPY AVAILABLE

2. Proprietary and Independent Postsecondary Institutions

Academie Moderne
Boston

Academia School of Languages
Cambridge

Academy of Musical Arts
Boston

Miss Allen's Back Bay School
of Modeling
Boston

Andover-Newton Theological
Seminary
Newton

Art Institute of Boston
Boston

Barbizon School
Boston

Bay State Junior College
of Business
Boston

Beauty Creators Academy
Chelsea

Becker CPA Review Course
Boston

Berlitz School of Languages
Boston

Boston Architectural Center
Boston

Boston Conservatory of Music
Boston

Bryant and Stratton
Boston

Bryman-Medix School
Brookline

Burdett College
Boston

Butera School of Art
Boston

Cades CPA School
Boston

Cambridge Junior College
Cambridge

Cambridge School
Boston

Cardinal Cushing College
Brookline

Career Training Institute
Boston

Carnegie Institute
Boston

Carney Hospital School of
Anesthesia
Boston

Carol Nashe School
Boston

Chamberlayne Junior College
Boston

College House Study Center
Cambridge

Copley Secretarial Institute
Boston

Court and Legal Stenographers
Institute
Boston

Dale Academy of Hairstyling
Boston

Debonaire Academy of Beauty Culture
West Roxbury

DiAnthony School of Cosmetology
Cambridge

Dolan Gertrude Theatrical
Studios
Jamaica Plain

Donohue Civil Service School
Boston

Eleanor F. Roberts Institute
of Electrology
Boston

Electronic Computer Programming
Institute
Boston

Episcopal Theological School
Cambridge

Miss Farmer's School of
Cookery
Boston

Farr Academy
Cambridge

Fashion Signatures
Brookline

Franklin Institute
Boston

General Motors Training
Center
Dedham

Griffith School of Speech
Somerville

Hanover Beauty Academy
Quincy

Hellenic College
Brookline

Henry I. Simmons School of
Floral Design
Wellesley

The Hickox School
Boston

Imageworks
Cambridge

Ingo Conservatory of Music
Boston

Institute of Management
Education
Brighton

Insurance Library Association
of Boston
Boston

ITT Technical Institute
Boston

Jean Cappy, Inc.
Boston

John Robert Powers Finishing
School
Boston

Katherine Gibbs School
Boston

Miss Kelly's School of
Electrology
Quincy

La Newton School of Beauty
Culture
Roxbury

Longy School of Music
Cambridge

Malden Business School
Malden

Management Development
Institute
Boston

Mansfield Beauty Academy
Boston

Mary Lentine School of
Hair Design
Boston

BEST COPY AVAILABLE

Massachusetts Association
of Real Estate Boards
Boston

Mass. College of Optometry
Boston

Mass. College of Pharmacy
Boston

Mass. Radio and Electronics
School
Boston

Massachusetts School of
Barbering
Boston

Modern Gourmet, Inc.
Newton

Mt. Alvernia
Newton

Neponset Circle Welding School
Dorchester

New England Educational Center
Holliston

New England Institute
Boston

New England School of Hypnotism
Quincy

New England School of Mechanical Dentistry
Boston

New England School of Photography
Boston

New England Tractor Trailer
Quincy

Northeast Institute of
Industrial Technology
Boston

Oblate College and Seminary
Natick

Orson Welles Film Society
Cambridge

Patricia Stevens Career and
Finishing School
Boston

Peterson's School of Steam
Engineering
Boston

Perry Normal School
Boston

Project, Inc.
Cambridge

Quincy Beauty Academy
Quincy

Rittners School
Boston

Robert Richard Beauty Academy
Waltham

Ryder Technical Institute
West Roxbury

St. Stephens College
Dover

Sales Training, Inc.
Chestnut Hill

School of Museum of Fine
Arts
Boston

School of Fashion Design
Boston

Stenotype International
Boston

Sylvania Technical School
Waltham

Tech-Age Business School
Malden

Touch Shorthand Academy
Boston

Travel School of America
Brookline

Vesper George School of Art
Boston

Wilfred Academy of Hair
Boston

Willett Institute of Finance
Boston

Woburn Business School
Woburn

3. Adult Education Programs

Belmont Public Schools
Belmont

Boston Public Schools
Boston

Cambridge Public Schools
Cambridge

Lexington Evening School
Lexington

Lexington Public Schools
Lexington

Milton Public Schools
Milton

4. Adult Education Centers

Cambridge Center for Adult Ed.
Cambridge

Boston Center for Adult Ed.
Boston

5. Vocational Technical Schools

Blue Hills Regional Technical
Institute
Canton

Boston Business School
Boston

Boston Girls Trade High School
Boston

Boston Vocational Technical
Institute
Boston

Henry O. Peabody School
Norwood

Quincy Vocational Technical
High School
Quincy

Rindge Technical School
Cambridge

Waltham Vocational High School
Waltham

Weymouth Vocational Technical
High School
East Weymouth

BEST COPY AVAILABLE

II. Correspondence Schools

A. ACCREDITED BY THE NATIONAL HOME STUDY COUNCIL

Academy of Millinery Design
Little Falls, New Jersey

Advance Schools, Inc.
Chicago, Illinois

American Automation Training
Centers
Kansas City, Missouri

American Computer Institute
New York, New York

American Institute of
Maintenance
Glendale, California

American Medical Record
Association
Chicago, Illinois

American Hotel School, Inc.
Roanoke, Virginia

American School
Chicago, Illinois

American School of Real
Estate
Roanoke, Virginia

American Technical Society
Chicago, Illinois

American Technological Institute
St. Petersburg, Florida

American Training Services, Inc.
Cherry Hill, New Jersey

Art Instruction Schools
Minneapolis, Minnesota

Atlantic School
Kansas City, Missouri

Automation Machine Training
Center, Inc.
Kansas City, Missouri

Bell and Howell Schools
Chicago, Illinois

Belsaw Institute
Kansas City, Missouri

Career Academy, Inc.
Milwaukee, Wisconsin

Careerco School for Para-
Professionals
Syracuse, New York

Carver Institute, Inc.
Mundelein, Illinois

Chicago Technical College
Chicago Illinois

Cleveland Institute of
Electronics
Cleveland, Ohio

Coast Navigation School
Santa Barbara, California

Colorado Sales Training
Institute, Inc.
Denver, Colorado

Columbia School of
Broadcasting
San Francisco, California

Commercial Trades Institute
Chicago, Illinois

Continental Schools
Los Angeles, California

Educational Institute of the
American Hotel and Motel
Association
East Lansing, Michigan

ELBA Systems Corporation
Denver, Colorado

Franklin Academy
Cleveland, Ohio

Gemological Institute of
America
Los Angeles, California

Grantham School of Engineering
Hollywood, California

Greer Technical Institute
Chicago, Illinois

The Hadley School for the
Blind
Winnetka, Illinois

Hemphill Schools
Los Angeles, California

Herzing Institute, Correspon-
dence Division
Milwaukee, Wisconsin

Highway Transportation Institute
Chicago, Illinois

Home Study Institute
Washington, D.C,

Institute of Applied Science
Chicago, Illinois

Institute of Children's
Literature
Redding Ridge, Connecticut

Institute of Continuing Education
Compton, California

Insurance Adjusters Schools, Inc.
Miami, Florida

Insurance Home Study Division,
Research and Review Service
of America
Indianapolis, Indiana

IAAO Programmed Courses
Chicago, Illinois

International Business Academy
Oklahoma City, Oklahoma

International Correspondence
Schools
Scranton, Pennsylvania

International Fabricare
Institute
Joliet, Illinois

Interstate Training Service
Portland, Oregon

ITT Technical Institute
Chicago, Illinois

BEST COPY AVAILABLE

JETMA Technical Institute
San Francisco, California

John Adams Institute
Cherry Hill, New Jersey

John Tracy Clinic
Los Angeles, California

Lafayette Academy, Inc.
Providence, Rhode Island

LaSalle Extension University
Chicago, Illinois

Lifetime Career Schools
Los Angeles, California

Lincoln Extension Institute,
Inc.
Jacksonville, Florida

Massey Technical Institute,
Inc.
Jacksonville, Florida

Mayday Company
Seattle, Washington

McGraw Hill Continuing
Education Company
Washington, D.C.

Metals Engineering Institute
Metals Park, Ohio

NAEBM--Westlawn School of
Yacht Design
Greenwich, Connecticut

National Camera, Technical
Training Division
Englewood, California

National Drafting Institute
Denver, Colorado

National Education Service
Santa Monica, California

National Institute of Real
Estate
Atlanta, Georgia

National Meat Packers
Training, Inc.
Kansas City, Missouri

National Safety Council,
Safety Training Institute
Chicago, Illinois

National School of Conservation
Washington, D.C.

National Tax Training School
Monsey, New York

National Technical Schools
Los Angeles, California

New York Institute of
Photography
New York, New York

Newspaper Institute of America
New York, New York

MIAW Home Study Institute
Columbus, Ohio

Miles Bryant School
Sacramento, California

North American Correspondence
Schools--National Systems
Corporation
Newport Beach, California

Palmer Writers School
Minneapolis, Minnesota

RCA Institutes, Inc.
New York, New York

Rickay Careers, Inc.
Milwaukee, Wisconsin

Sales Training, Inc.
Seattle, Washington

Sales Training of Detroit
Detroit, Michigan

Sales Training of
Milwaukee, Inc.
Milwaukee, Wisconsin

Sales Training of
Phoenix, Inc.
Phoenix, Arizona

Sales Training of Twin
Cities, Inc.
Minneapolis, Minnesota

Seminary Extension Home
Study Institute
Nashville, Tennessee

Technical Education
Corporation
St. Louis, Missouri

Technical Home Study
Schools
Little Falls, New Jersey

Technical Training
International
Walnut Creek, California

Truck Marketing Institute
Santa Barbara, California

United Electronics
Institute
Louisville, Kentucky

United Schools, Inc.
Knoxville, Tennessee

United Training Service,
Inc.
Miami, Florida

Universal Schools, Inc.
Washington, D.C.

U.S. School of Music
Port Washington, New York

Washington School of Art
Port Washington, New York

General Educational Services
Corporation
Kansas City, Missouri

Writers Institute
New York, New York

B. OUT-OF-STATE PRIVATE CORRESPONDENCE SCHOOLS REGISTERED IN MASSACHUSETTS

Advance Schools, Inc.
Chicago, Illinois

Alexander Hamilton Institute
New York, New York

American Motel School
Roanoke, Virginia

American School of
Correspondence
Chicago, Illinois

Art Instruction/Palmers
Writers School
Minneapolis, Minnesota

Atlantic Schools
Kansas City, Missouri

Bell and Howell Schools
Chicago, Illinois

Capitol Radio Engineering
Institute
Washington, D.C.

BEST COPY AVAILABLE

Career Academy, Inc.
Milwaukee, Wisconsin

Chicago Technical College
Chicago, Illinois

Cleveland Institute of
Electronics
Cleveland, Ohio

Columbia School of Broadcasting
San Francisco, California

Commercial Trades Institute
Miami Beach, Florida

Computer College of Technology
Miami Beach, Florida

ELBA Systems Corporation
Denver, Colorado

General Training Service
North Bellmore, New York

International Accountants
Society
Chicago, Illinois

International Correspondence
Schools
Scranton, Pennsylvania

Lafayette Academy
Providence, Rhode Island

Lasalle Extension University
Chicago, Illinois

Lear Siegler Institute
Silver Spring, Maryland

Lincoln Service, Inc.
Pekin, Illinois

National Institute of
Meat Packing
Mundelein, Illinois

Ryder Technical Institute
Atlanta, Georgia

North American Correspondence
Schools
Newport Beach, California

Northwest Schools
Portland, Oregon

RCA Institutes
New York, New York

Rickey Careers, Inc.
Milwaukee, Wisconsin

Universal Schools
Miami, Florida

Weaver Airline Personnel School
Kansas City, Missouri

American Training Service
Cherry Hill, New Jersey

Careerco
Syracuse, New York

Stock Market Institute
Park Ridge, Illinois

BEST COPY AVAILABLE

BEST COPY AVAILABLE

APPENDIX B

List of Publications of the Massachusetts Advisory Council on Education

LIST OF PUBLICATIONS OF THE

MASSACHUSETTS ADVISORY COUNCIL ON EDUCATION
182 Tremont Street
Boston, Massachusetts 02111

1973

Academy for Educational Development, Inc., "Higher Education in Massachusetts: A New Look at Some Major Policy Issues"

Creative Studies Inc., "The Here, Now and Tomorrow of Cable in Education...A Planning Guide"

Harvard University, "Essentially Elementary Science"

1972

Paul W. Cook, Jr., "Modernizing School Governance for Equality and Diversity"

Richard H. deLone, "Massachusetts Schools: Past, Present and Possible"

Richard Rowe, "Child Care in Massachusetts: The Public Responsibility"

1971

Burton Blatt and Frank Garfunkel, "Massachusetts Study of Educational Opportunities for Handicapped and Disadvantaged Children"

Donald T. Donley, "Organizing for a Child's Learning Experience: A Report on a Study of School District Organization in Massachusetts"

Lloyd S. Michael, "Quality Education for the High Schools in Massachusetts: A Study of the Comprehensive High School in Massachusetts"

1970

Joseph M. Cronin, "Organizing an Urban School System for Diversity"

John S. Gibson, "The Massachusetts Department of Education: Proposals for Progress in the 70's"

Daniel Jordan and Kathryn H. Spiess, "Compensatory Education in Massachusetts: An Evaluation with Recommendations"

Melvin Levin and Joseph Slavet, "Continuing Education in Massachusetts: State Programs for the Seventies"

Charlotte Ryan, "The State Dollar and the Schools: A Discussion of State Aid Programs in Massachusetts and Promising Reforms"

Publications (cont'd.)

Warren King and Associates, "Report of the Massachusetts Business Task Force for School Management"

1969

Andre Danière, "A Cost Benefit Analysis of General Purpose State School Aid Formulas in Massachusetts"

____________ and George Madaus, "The Measurement of Alternative Costs of Educating Catholic Children in Public Schools"

Bruce Dunsmore, "Guidelines for Planning and Constructing Community Colleges

Herbert Hoffman, "Take a Giant Step: Evaluation of Selected Aspects of Project 750"

Gordon Liddle and Arthur Kroll, "Pupil Services in Massachusetts Schools"

1968

Information Management, Inc., "The Management of Educational Information"

Carl Schaefer and Jacob Kaufman, "Occupational Education for Massachusetts"

Lindley J. Stiles, "Teacher Certification and Preparation in Massachusetts

1967

Samuel Gove, "The Massachusetts System of Higher Education in Transition"

New England School Development Council, "Inequalities of Educational Opportunity in Massachusetts"